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# **TRAINING FOR FISHERIES MANAGEMENT**

## **FRDC PROJECT 94/057 - FINAL REPORT**

### **1994 - 1997**

**DR. ALISTAIR MCILGORM (PROJECT OFFICER)**

**DR. COLIN BUXTON (PRINCIPAL INVESTIGATOR)**

**F I S H E R I E S  
R E S E A R C H &  
D E V E L O P M E N T  
C O R P O R A T I O N**



**Australian Maritime College**



**NOVEMBER, 1997**

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FRDC Management Advisory Committee Course Participants  
Victorian Fishing Industry Federation  
Melbourne May 1997



Professional Fisheries Management FRDC A Course  
Australian Maritime College, Tasmania  
10th - 21st June, 1996

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**FINAL REPORT - TRAINING FOR FISHERIES MANAGEMENT**  
**FRDC PROJECT 94-057**

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## **Summary**

The objective of this project was to provide fisheries management training to Government Fisheries staff and Management Advisory Committee representatives in order to enhance fisheries management skills at this level in Australia.

The project sought to train 120 fishers involved in Management Advisory Committees over the three year period. Initial difficulties in convincing the industry to be part of the project were overcome in the first year of the project and an appropriate course formula was developed to instruct representatives in multi-state courses at the Australian Maritime College (AMC) and latterly at single state courses in three states of Australia. In the end a total of 102 MAC members attended short course programs under the project. The courses were well received by industry and have broken new ground in training in the Australian fisheries scene, contributing significantly to the recent development and growth of the MAC model of fisheries management in Australia.

Fisheries Management training was also provided for 72 professional fisheries managers through 5 and 10 days short courses and workshops over the three year period. This has also made a significant contribution to fisheries management in Australia given the changes in staff that are common place at all levels in fisheries administration.

A significant evolution during the course of the project has been a move to co-management. This has signified a need to consider bridging the gap between the training provided to each of the groups.

## **Background**

Prior to 1994, AMC had run Fisheries Officers Courses and a popular Fisheries Administrators Course, but it was becoming clear that the role of industry in fisheries management was going to be a significant issue in the 1990,s in Australia. There was no training available for industry representatives and the moves to form Management Advisory Committees at both Federal and State levels meant there was potential to develop training for these representatives. This project was developed to address these changes and to enhance the training available for all parties involved in the management of fisheries in Australia in the 1990,s.

## **Need**

The project identified the following needs:

1. Short course training for fishing industry representatives and non-government representatives in fisheries management.

It was recognised that industry representatives would be from "Commonwealth and State Fisheries management bodies and preliminary investigations suggested that in the next three years 120 or more representatives would require short course training".

2. More substantive training for fisheries administrators and managers on an in-service basis through the provision of interactive residential schools at AMC.

It was identified that fisheries administrators and policy makers had little formal training in fisheries management. Participation in residential schools at AMC, with a limited time away from work, was seen as the solution.

In both (1) and (2), the use of Australian Maritime College as a central place for training was seen as providing interchange and networking on a national scale.

## **Changes During the Course of the Project**

The project started by offering training to the MAC members at the Commonwealth level. This was not as successful as initially envisaged and the project moved to address the need at the State level. The number of MAC members increased in Australian fisheries management over the three years of the project driven by the formation of MAC's in several states. The inclusion of more than industry

representatives was recognised in the need for the training. Feedback from participants showed that industry was keen to have managers and other sectors represented on courses so that the management communication process improved through non-industry players being made familiar with complex fisheries issues. This need to understand the other parties was also voiced by the fisheries managers. They see a need to mix managers and industry/user group involvement in training as co-management regimes develop.

## Objectives

The objectives were:

1. Short course training for fishing industry representatives and non-government representatives in fisheries management.
2. More substantive training for fisheries administrators and managers on an in-service basis through the provision of interactive residential schools at AMC.

## Methods

### 1. Management Advisory Committee Courses (MAC Courses)

The original intention for the MAC courses was to have a 5 day course. This was soon found to be too long for industry as the true cost of training was the time lost by participants from alternative activities - fishing and business. The final formula was found to be a two day course, of which one day could be a Saturday.

The two day course program was divided into four sections as follows:

	<b>Morning</b>	<b>Afternoon</b>
<b>Day One</b>	Introduction/responsibilities	Educational/theory
<b>Day Two</b>	Management issues/skills	Making MAC's work

The morning of the first day was an introduction to the duties and responsibilities of a MAC member. The rest of the first day was educational, enabling issues to be addressed in an educational framework, rather than through the issues specific approach used in MAC meetings. Each session in day one concluded with a discussion period to draw on the participant's experience. Day one concluded with a dinner as part of the program and a continuation of the discussions in a non-formal

atmosphere. The informal exchanges at dinner were seen as a highlight by many fishers who welcomed the chance to learn from each other. A typical MAC course schedule is shown in Appendix 1.

Day two continued the educational theme with stock assessment, risk assessment and environmental and technology issues in the morning and a discussion of management issues subsequent to these presentations. After lunch on the final day the issues of making the MAC process work and representation were discussed.

It was recognised that traditional teaching methods would not be effective with the fishers and representatives. Given the depth of experience in fisheries in each course the approach taken by presenters was to deliver a 10 minute presentation as an overview on the subject material and then to allow a debate on the subject. On occasions a small discussion panel of representatives who were known to have significant experience in a given area of fisheries was used to guide the debate. This was particularly successful when numbers on the course exceeded 20 participants.

One of the major changes that occurred during the project was to conduct courses away from AMC. This was less expensive for both participants and the funding agency, especially for participants from areas such as Western Australia or Queensland. This diluted the potential for "cross pollination" of fishing industry culture and policies between the different states. This development was necessitated as a result of responses to industry peak bodies funding participant expenses. The project preference remains with the course being conducted at AMC with participants from several states.

## **2. Professional Fisheries Management Courses**

The residential school for fisheries management professionals was envisaged as being four weeks in duration at the time of the application. This was found to be too long a period away from the office at one time and consequently the residential school was divided into two parts, FRDC A and FRDC B.

The FRDC A built on the existing Fisheries Administrator's course run by AMC and was for 10 working days duration. An FRDC A course schedule from June 1997 is shown in Appendix 2. The FRDC B course was developed in workshop format and was built

around the theme of commercial and non-commercial interests in fisheries management. An FRDC B workshop program is shown in Appendix 3.

The FRDC A has become a popular introductory course for new and junior staff in Fisheries Departments. The typical participant may have several years of administrative experience or training to degree level, seeking a rapid introduction to fisheries problems and ways that these can be addressed. The course also seeks to illustrate fishing methods and the practicalities of regulation and policy making.

In the FRDC B workshops the participants were required to produce a presentation which shared policies and experiences. The first course was 8 days in duration, but was subsequently reduced to 5 days in 1997. In both Part A and B time away for the workplace was a limiting factor, especially for more senior policy makers. Changes in fisheries department staffing meant this was a significant issue.

Participants were asked to prepare papers and these are to be published in one volume:

McIlgorm, A. and C. Buxton Editors (in prep). Participant papers from the FRDC B Fisheries Managers Workshops, 1996 & 1997. FRDC Project, 94-057: Training for Fisheries Management 1994-97, Australian Maritime College, pp220.

### **Participant Feedback**

In all courses, feedback from participants was sought and was used to alter the program content and delivery when necessary. Each course participant was issued with a survey sheet to be returned at the end of the course. This was part of AMC Search Ltd. Quality Assurance guidelines and proved to be an effective quality control mechanism. Results from survey sheets are presented under the section below.

### **Detailed Results**

The project results are reported in three categories:

- 1) Management Advisory Committee courses,
- 2) Professional fisheries management courses, and
- 3) Survey results.



## 1. Management Advisory Committee courses

The execution of courses over the three years of the project is given below:

	Venue	Number	States participating
May 95	AMC	26	VIC, SA, NSW, TAS, QLD.
Nov 95	AMC	18	S.A., VIC, TAS.
May 96	South Australia	13	S.A.
Sept 96	W.A.*	14*	W.A.
Nov 96	Queensland	8	QUEENSLAND ONLY
		14	(Townsville & Brisbane)
May 97	Victoria	23	Victoria Only
<b>Project Total</b>		<b>102 (116)*</b>	

\*AMC joint involvement with WAFIC.

The project directly trained 102 (85%) of the envisaged 120 representatives. Adding AMC joint involvement with WAFIC increases this to 116 representatives (97% of envisaged numbers).

The training was achieved on 71% of the envisaged project budget as shown under Final Cost. This was due to fewer courses, but more participants per course than initially projected.

## 2. Professional Fisheries Management Courses

The execution of courses over the three years of the project is given below.

Date	Venue	Type	Participants	States participating
June 95	AMC	FRDC A	17	AFMA, NSW, NT, QFMA, SA, TAS, VIC WA.
March 96	AMC	FRDC B	11	AFMA, NT, TAS, VIC, WA.
June 96	AMC	FRDC A	22	AFMA, NSW, NT, SA, TAS, VIC, WA.
April 97	AMC	FRDC B	10	AFMA, NSW, NT, TAS, VIC, WA.
June 97	AMC	FRDC A	12	AFMA, NSW, QFMA, TAS, WA.
<b>Project Total</b>			<b>72</b>	

The project trained 71 (96%) of the 75 administrators projected for these courses.

The costs of the Fisheries Management courses were reduced over the duration of the project by strengthening AMC's internal lecturing team and using fewer visiting speakers. However, it is essential that the courses do have access to expertise if it is not available in AMC.

### 3. Survey Results

Each course was surveyed by a short course survey as shown in Appendix 4. The results are interpreted numerically and specifically as well as providing overall written comments.

#### a. Numerical Results

The participant had the opportunity during the course to grade the lecturer, relevance and subject content. The system used to grade the performance was:

Lecturer: Poor Fair Good Excellent. (translating to 1, 2, 3 and 4 points).

Course content: Too much About right Not enough (1,2 and 3 points).

The results for each course reported were collected and tabulated and are presented in Appendix 5. A summary table of lecturer results is shown in Figure 3 below.

MAC COURSES			Lecturer Grade - % Overall				
	Venue	Participants	Poor	Fair	Good	Excellent	Overall Percentage
May 95	AMC	26	0	5	76	19	80%
Sep 95	AMC	18					NS
May 96	Adelaide	13					NS
Oct 96	Townsville	8	0	13	73	14	75%
Oct 96	Brisbane	14	1	11	58	30	80%
May 97	Melbourne	23	3	18	62	17	73%
<b>TOTAL</b>		<b>102</b>					

FRDC A FISHERIES MANAGEMENT COURSE			Lecturer Grade - % Overall				
	Venue	Participants	Poor	Fair	Good	Excellent	Overall Percentage
Jun 95	AMC	17	4	16	49	32	77%
Jun 96	AMC	22	2	14	57	27	77%
Jun 97	AMC	12	2	13	45	40	80%
<b>TOTAL</b>		<b>51</b>					

FRDC B FISHERIES MANAGEMENT COURSE			Lecturer Grade - % Overall				
	Venue	Participants	Poor	Fair	Good	Excellent	Overall Percentage
Mar 96	AMC	11	0	6	64	30	81%
Apr 97	AMC	10	1	14	69	16	75%
<b>TOTAL</b>		<b>16</b>	<b>1%</b>	<b>12%</b>	<b>61%</b>	<b>25%</b>	<b>78%</b>

### NS - Not Sampled

The results indicate a high level of satisfaction with the performance of lecturers on all courses. The average overall suggests that out of 174 people on all courses in the three years of the project, 87% thought that lecturing was Good or Excellent. Only 13% were Fair, and less than 1% of gradings were Poor. This is the equivalent of an average mark for all lecturers on all courses of 77%. This is a very high standard and is supported by the written survey feedback. (Appendix 5).

The subject content was appraised by a mixture of numerical results, survey comments and after course discussions. From the analysis of the "Too Much", "About Right" and "Not Enough" comments, a numerical figure can be developed (See right hand side columns of tables in Appendix 5). An index number of 2 indicated the balance was about right, where a number above this indicated not enough, and a number below 2 was indicative of too much content.

The results need to be interpreted in the context of each course and the written comments received. However the following general points are made from the numerical analysis:

### MAC Courses:

1. Fisheries Research and Stock Assessment, Fisheries Property Rights, and Conflict Resolution consistently received comments of "Not Enough". The reason given is that takes time to assimilate these subjects and that conflict resolution is an essential part of MAC's.

2. Fisheries Economics and Fishery Management Plans received “Not Enough” or “About Right” ratings but an occasional “Too Much” rating. The reason for this was that background of participant varied considerably.
3. Risk Assessment, Environment and Technology, and Environment in Management had comments of “Too Much” in initial course surveys, but have subsequently become “About Right”. The reason is a greater awareness of the environment and the need to manage rather than fear problems.

### **FRDC A Fisheries Management Course**

- 1) Native Title, Gear Technology for Administrators, Politics in Fisheries, What the Fishing Industry Expects from Fisheries Managers, Aquacultural Policy and Fishing Gear and Environment are all numerically rated as “Not Enough”. The reason are that they are essentials for the administrator and that they desire to understand gear technology basics and work with a better understanding of the industry.
- 2) Fisheries Economics, Fisheries Biology, Managing Marine Resources, Recreational Fisheries Management, ESD, and Enforcement and Compliance were mostly “Not Enough” and “Too Much”. The reason for this was that it depended on the group and their background and involvement in different areas of management.
- 3) Comments on Computer Simulation were the most varied, but like Fisheries Economics and Fisheries Biology often reflect the participants previous exposure to the subject. This was very dependent on the background/expectations of the participant and knowledge computing and stock assessment.

### **FRDC B Fisheries Management Workshops**

- 1) Co-management, Property Right Issues in Fisheries (Legal and Economic), Fishery Restructuring Mechanisms, and Environmental Instruments and Implications for Management have been endorsed in both workshops. These are the key themes of the workshop and are capable of more than the time available in the workshop.

## **Written Comments**

Written comments were sought on each individual lecture and on the overall course. The individual lecture comments are used to alter the content and improve the quality of the courses. A selection of overall course comments are summarised in Appendix 5 beneath the numerical results.

These indicate that the courses were of a high standard and met the needs of the MAC representatives and the fisheries managers. There were no responses on the overall course that were negative in all courses surveyed. Several negative comments were expressed on individual sessions, but these were only a small percentage of all comments received. The project also received unsolicited letters from participants and these are available on request from the project officer.

The encouraging part of the written responses were that the MAC course participants were more than satisfied with the course meeting their needs. Similarly the Fisheries Management courses indicated the relevance of the course material to their current roles in fisheries management and also their careers. This was the objective of the courses and the project as the training envisaged was to address the shortfalls of skills in the fishing industry and fisheries management sectors. The positive responses in the written comments indicate this objective as met and a significant contribution made to the course participants.

## **Benefits**

The benefits of this training project may be recognised in both the short and longer term.

Immediate benefits were recognisable in the comments of representatives and fisheries managers who, on completion of short courses, indicated that the objectives to give a better understanding of fisheries management principles, practices and policy have been met and a successful learning outcome achieved. In addition, formal and informal interaction of participants provided the chance to discuss fisheries policy issues with fishers or fisheries managers from other states, providing networking that was a significant part of the learning process.

The course discussions were a significant opportunity to hear other fishers in a formal fisheries arena without government agency staff. This led to the development of "stakeholder positions" which many participants had not previously discussed across different fishery industry sectors. This applied to non-industry sectors such as recreational and community representatives.

Longer term benefits of the project are also apparent. The courses have contributed to changing industry perceptions on issues, policies and other parties in the fisheries management process in a way that will have long term benefits in fisheries management. Co-management demands a greater contribution to the management process than in the past and that the extent of the future role of resource users in management is dependent on their performance in MAC's. Training for industry has been established as an integral part of the maturing MAC process as representatives recognise the complexity of the task.

Fisheries managers have benefited from these courses in that they have been able to give greater consideration to the needs of stakeholders through more exposure to industry and user groups. This has been very positive for both parties and has helped to strengthen communications between all stakeholders.

### **Intellectual Property**

There were no specific developments in the project with implications for intellectual property other than courses developed.

### **Further Development**

Over the course of the project it became apparent that the Management Advisory Committee (MAC) system of management was going to be adopted in most states of Australia. This means that a significant number of representatives from industry and other organisations on the MAC's require training in the next three years. The project has been developed and re-submitted to the FRDC to address these increased training needs - envisaging training 180 MAC representatives under the new project FRDC 97/337 "Training for Fisheries Managers" for the years 1997-2000.

Within the new project the emphasis is to have more activities that make MAC representatives and fisheries managers come together and discuss the issues out of their local and often adversarial environment. The project will also enhance the personal skills of fishers in the areas of conflict resolution and preparation of report/discussion papers and try and promote leadership within industry and stakeholder groups. This will continue to build on the foundations laid in this project.

## **Staff**

Principal Investigator	1994-96	Ian Cartwright
Principal Investigator	1996-97	Dr Colin Buxton
Project Officer/s	1994-96	Dr Alistair McIlgorm and Marc Wilson
Project Officer	1997	Dr Alistair McIlgorm

## **Short Course Lecturers**

**Industry:** Ted Loveday, Brett McCallum, Karen Clifton, Darby Ross, Robin Pike, Ian Freeman, Micheal Arbuckle (NZ), Bill Mitchell,

**Government:** Mike Sullivan, Adrianna Pinnock, Barbra Morris, Phillip Hamilton (all New Zealand) Dr Albert Caton (BRS), Dr Rebecca Metzner (VicF), John Robertson (GBRMPA), Peter Rawlinson (VicF), Phil Cadwallader (QFMA)

**Academic:** Dr Marcus Haward (U. Tas), Prof. Martin Tsamenyi (U.Wollongong), Prof. Harry Campbell (U. Queensland),

**AMC Staff:** Dr Colin Buxton, Shekar Bose, Ian Cartwright, Steve Eayrs, Marc Wilson, Dr Alistair McIlgorm.



## Final Cost

### Project Budget

Year	Salaries	Travel	Operating	Capital	FRDC Total
94/95	22,500	13,410	57,375	3,500	96,785
95/96	23,125	16,842	71,456	0	111,423
96/97	23,750	17,347	73,600	0	114,697

Year	FRDC	Research Organisation	Other	FRDC Total
94/95	96,785	36,200	76,500	209,485
95/96	111,423	37,286	95,790	244,499
96/97	114,697	38,405	98,663	251,765
<b>TOTALS</b>	<b>322,905</b>	<b>111,891</b>	<b>270,953</b>	<b>705,749</b>

### Project Expenditure

Year	Salaries	Travel	Operating	Capital	FRDC Total
94/95	22,500 (100%)	8,074 (60%)	28,240 (49%)	2,950(84%)	61,795 (64%)
95/96	23,125 (100%)	13,539 (80%)	52,131 (73%)	0	88,795 (80%)
96/97	23,750 (100%)	14,346 (83%)	41,710 (57%)	0	79,806 (70%)

Year	FRDC	Research Organisation	Other	FRDC Total
94/95	61,764 (64%)	30,000(83%)	76,500(100%)	168,264 (81%)
95/96	88,795 (80%)	32,500(87%)	95,790(100%)	217,085 (88%)
96/97	79,806 (70%)	33,750(88%)	98,663(100%)	212,219 (84%)
<b>TOTALS</b>	<b>228,365 (71%)</b>	<b>96,250 (86%)</b>	<b>270,953 (100%)</b>	<b>597,568 (85%)</b>

Figures in parenthesis are percentages of budget.

## **Distribution of the Report**

### Fisheries Agencies

Australian Fisheries Management Authority (AFMA)

New South Wales Department of Fisheries (NSWF)

Tasmanian Sea Fisheries (TSF)

Queensland Fisheries Management Authority (QFMA)

Northern Territory Fisheries (NTF)

Western Australian Fisheries (WAF)

South Australian Fisheries (PISA)

### Fishing Industry Representative bodies

Queensland Commercial Fisheries Organisation (QCFO)

Western Australian Fishing Industry Council (WAFIC)

South Australian Fishing Industry Council (SAFIC)

Victorian Fishing Industry Federation (VFIF)

Northern Territory Fishing Industry Council (NTFIC)

Tasmanian Fishing Industry Council (TFIC)

Australian Seafood Industry Council (ASIC)

National Fishing Industry Training Council (NFITC)

CSIRO Division of Fisheries (CSIRO).

Appendix 1 - Illustrative MAC Course Program – Queensland, November 1996

FRDC MAC Course

Final 7-11-96

*Australian Maritime College (AMC)*  
*in conjunction with*  
*QCFO, QFMA and Qld. DoE*

*November 7th and 8th, 1996*

VENUE: Virginia Palms, Brisbane

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Thursday

08.45-09.00	Subject: What is a MAC course?	Alistair McIlgorm
09.00- 09.20	Subject: Review of the role of Management Advisory Committees in different States including Queensland	A. McIlgorm
09.20- 09.40	MACs in Queensland Responsibilities under the Act	Phil Cadwallader (QFMA)
09.40-10.00	Responsibilities of a MAC Chairman	Bill Mitchell, Crab MAC
10.00-10.30	Discussion	
10.30-10.45	Morning tea	
10.45-11.15	Subject: Management	Alistair McIlgorm
11.15-11.45	The Processes of Government and Management Planning.	Marc Wilson
11.45- 12.00	Discussion	
12.00-13.00	Lunch	
13.00-13.45	Fisheries Research and Stock Assessment -	M. Wilson
13.45-14.30	Subject: Fisheries property rights and resource access	A. McIlgorm
14.30-14.45	Afternoon tea	
14.45-15.30	Subject: Fisheries Economics: - (i) Background (ii) Policy & Issues (iii) Regulating the Industry	A. McIlgorm
15.30-16.00	Discussion (i) <i>Industry role in determining fisheries research and stock assessment.</i> (ii) <i>Cost recovery for fisheries research and management.</i>	

**Friday**

- 08.45 - 09.45: Subject: Risk Assessment in Fisheries Management  
Discussion: *Risk assessment in Fisheries Management* M. Wilson
- 09.45- 10.30 Environmental instruments and the Fishing Industry:  
Discussion: *Environment, Habitat and the Fishing* A. McIlgorm
- 10.30-10.45 Morning tea
- 10.45-11.15 Subject: Fishing Technology and the Environment  
M. Wilson  
& A. McIlgorm
- 11.15-11.30 Discussion: *Environmentally Friendly Gear and Bycatch Management*
- 11.30-12.15 Subject: Conflict in Fisheries Management  
A. McIlgorm  
& M. Wilson
- 12.15-12.30 Discussion
- 1230 - 13.30 Lunch
- 13.30-14.30 Fisheries Management Plans and industry awareness.  
A. McIlgorm &  
M. Wilson  
Discussion: *Communication/ Constituency/ and Leadership  
within Resource User Groups*
- 14.30-15.00 Role of Training: Discussion, Recommendations and Closing Summary

*Course Coordinator: Dr Alistair McIlgorm*

**FRDC Fisheries Managers Part A Course**

**Final 12-6-97**

*Australian Maritime College (AMC)  
June 16th - 27th, 1997*

VENUE: Beauty Point Campus, Australian Maritime College

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**ARRIVAL**

SUNDAY 15th JUNE    Arrival in evening  
VENUE                    Conference Room in the Sports Centre,  
                                  Bagot Street Campus, Beauty Point.

**WEEK 1** -----

MONDAY 16th JUNE:

0845-0900	Welcome to AMC	Colin Buxton, Faculty Director.
0900-0930	Introduction to the Fisheries Problem	Marc Wilson
0930-1200	Fisheries Biology for Administrators I - Basic fisheries data - Yield	Marc Wilson
1300-1700	Gear Technology Essentials for Administrators I	Steve Eays

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TUESDAY 17th JUNE:

0900-1200	Fisheries Biology for Administrators - Yield - Population dynamics	Marc Wilson
1300-1700	Politics and Fisheries	Dr Marcus Haward, U.Tas

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WEDNESDAY 18th JUNE:

0900-1200	Fisheries Ecology for Administrators	Marc Wilson
1300-1600	Common property and Fisheries Economics - Social cost and market failure - The basic production model	Shekar Bose
1600-1700	The Fishing Industry	Marc Wilson
1600-1730	Simulation computer modelling	Marc Wilson

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THURSDAY 19th JUNE:

- 0900-1200 Aquacultural policy issues  
- Public policy and Aquaculture (marine) Marc Wilson  
- Stock enhancement and aquaculture  
- Future constraints to the development of aquaculture
- 1300-1700 Gear Technology Essentials for Administrators II Steve Eayrs
- 
- 1700-1800 (Evening flume tank session 2 hours available)
- 

FRIDAY 20th JUNE:

- 0900-1200 Fisheries Technology Steve Eayrs  
- Impact on management and environment
- 1300-1700 Recreational Fishing Colin Buxton  
- Problems in valuation  
- Conflict with Commercial fishermen  
- Case study
- 1800 Staff, participant dinner - Beauty Point Hotel

SATURDAY 21st JUNE:	0800-late	Vehicle trips to Hobart or other in State attractions.
SUNDAY 22nd JUNE:	Free day	

WEEK 2 -----

MONDAY 23rd JUNE:

- 0900-1200 Rights based fishing: Fisheries Economics and Policy Alistair McIlgorm
- 1300-1645 International Law Treaties and Conventions Prof. Martin Tsamenyi,  
- UNCLOS III Uni. Wollongong.
- 1645-1700 Commencement of Hypothetical Alistair McIlgorm  
- Group selection and organisation
- 
- 1700-1900 Native Title and indigenous Property Rights Martin Tsamenyi  
- Issues in Resource Management
- 

TUESDAY 24<sup>th</sup> JUNE

- 0900-1200 UNCLOS III and Marine Resource Martin Tsamenyi
- 1300-1700 Managing Marine Resources I Alistair McIlgorm
- 

WEDNESDAY 25th JUNE:

- 0900-1200 What the Fishing Industry expects from Fisheries Management and Fisheries Managers Karen Clifton, VFIF
- 1300-1700 Enforcement and Compliance I Mike Sullivan, MAF, NZ  
- The Role of Compliance  
- Detection of Fisheries Offences
-

THURSDAY 26th JUNE:

0900-1200	Enforcement and Compliance II ITQs, detection etc? - Interaction with Managers and Scientists - Discussion on N.Z. and Australian experiences.	Mike Sullivan
1300-1700	Environment and Fisheries Management	Alistair McIlgorm
1700-1800/ Evening	Finalisation of management plans for seminar presentation.	
Evening	Course dinner and entertainment, Beauty Point/Launceston	

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FRIDAY 27th JUNE:

0900-1200	Managing Marine Resources II	Alistair McIlgorm
1300-1445	Assessment of Management Hypothetical presentations	Alistair McIlgorm
1445-1500	Participant survey and course feedback	Alistair McIlgorm

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FRIDAY 28th JUNE Transfer to Launceston/Hobart Airport.

*Course Co-ordinator - Dr. Alistair McIlgorm*

## FRDC Fisheries Managers Part B Workshop

*Australian Maritime College (AMC)  
14th - 18th April, 1997*

VENUE: Beauty Point Campus, Australian Maritime College

### Monday 14th April

0900	Introduction to Workshop	Dr. Alistair McIlgorm
0915	Economic Issues in the Enhancement of Fisheries Property Rights	Dr. Alistair McIlgorm
1000	Morning Tea	
1015 - 1100	<i>Workshop Presentation:</i> Scallop Management in Port Phillip Bay	Brett Peters Victorian Fisheries
1100 - 1200	Legal Issues in Enhancement of the Fisheries Property Rights	Prof. Martin Tsamenyi
1200 - 1300	Lunch	
1300 - 1430	<i>Workshop Discussion Session:</i> Legal/Economic Issues in the Enhancement of Fisheries Property Rights	Prof. Martin Tsamenyi
1430	Afternoon Tea	
1500 - 1600	Indigenous Issues in Fisheries Management - An Update for Administrators	Prof. Martin Tsamenyi
1600 - 1700	<i>Workshop Presentation:</i> Prawn Fishery Management in South Australia	Neil McDonald, PISA

### Tuesday 15th April

0900 - 0930	Fisheries Management Plans	Dr. Alistair McIlgorm
0930 - 1000	<i>Workshop Discussion:</i> Fisheries Management Planning	
1000	Morning Tea	
1015 - 1100	<i>Workshop Discussion Session:</i> Fisheries Management Plans	
1100 - 1200	<i>Workshop Presentation:</i> Policy Development in Commonwealth Fisheries Management Incorporating User Groups	Frank Meere, AFMA
1200 - 1300	Lunch	
1300 - 1400	<i>Workshop Presentation:</i> Industry Advisory Committees in Tasmania	Hilary Revill, TSF
1400 - 1430	<i>Workshop Discussion Session:</i> What is Co-Management?	
1430	Afternoon Tea	
1500 - 1600	Fisheries Co-Management	Dr. Marcus Haward, UTAS
1600 - 1700	<i>Workshop Discussion Session:</i> Co-Management, Structure and Effectiveness	



**Wednesday 16th April**

0900 - 1000	<i>Workshop Presentation:</i> Cost Effective Consultation in Fisheries Management - What is it?	David Johnston, AFMA
1000	Morning Tea	
1015 - 1100	<i>Workshop Discussion Session:</i> Fisheries Management Plans and the Integration of Advisory Committees - Conclusions	
1100 - 1230	Fisheries Structural Adjustment: A National Approach	Peter Rawlinson, Vic
1230 - 1330	Lunch	
1330 - 1430	International Environmental Instruments and Fish Trade	Dr. Alistair McIlgorm
1430	Afternoon Tea	
1500 - 1600	<i>Workshop Discussion:</i> The Marine Stewardship Council Initiative	
1600 - 1700	<i>Workshop Presentation:</i> Compliance Issues in Dealing with Illegal Fishing in Australia	Stuart Fitch, AFMA

**Thursday 17th April**

0900 - 1000	The Precautionary Principle	Marc Wilson
1000	Morning Tea	
1015 - 1100	<i>Workshop Discussion Session:</i> Fisheries Management Plans and the Environment: Comparison of State Policies	Alistair McIlgorm Marc Wilson
1100 - 1200	<i>Workshop Presentation:</i> Managing Uncertainty in the NT Coastal Line Fishery	Graham Johnston, NTF
1200 - 1300	Lunch	
1300 - 1400	<i>Workshop Presentation:</i> Fisheries Action Program - Fish Care NSW	Kelly May, NSWF
1400 - 1500	Marine Park Refugia and Protection of Fisheries Habitat	Dr. Colin Buxton
1500	Afternoon Tea	
1515 - 1600	<i>Workshop Discussion:</i> Protecting Fish Habitat	
1600 - 1700	<i>Workshop Presentation:</i> Fisheries and Technology	Robert Green, TSF

**1830      Launceston: Course Dinner - Cafe Gazebo**

**Friday 18th April**

0900 - 1000 Allocation to the Non-Commercial Sector: Coastal Zone Planning and Fisheries Regimes to Harmonise Multiple Sea Use Marc Wilson

1000 Morning Tea

1015 - 1100 *Workshop Presentation:* W.A. Fishery Case Study Cathy Campbell, WA

1100 - 1200 *Workshop Discussion:* Allocation to the Non-Commercial Sector, Mechanisms and Conflict Resolution

1200 - 1300 Lunch

1300 - 1400 *Workshop Discussion:* Management of Recreational and Commercial Dive Fisheries in Tasmania

1400 - 1500 Workshop Conclusions

Coordinator: Dr Alistair McIlgorm

Appendix 4: - Short Course Survey - Example

**FRDC MAC Course SURVEY**

*Australian Maritime College (AMC) in conjunction with VFIF May 2nd and 3rd, 1997*

**Friday**

**9.00- 9.10 Subject: What is a MAC course? Alistair McIlgorm**

CONTENT                      needed more                      about right                      too much

LECTURER                      Poor                      Fair                      Good                      Excellent

**9.10- 9.30 Subject: Review of the role of Management  
Advisory Committees in different States  
including Victoria**

**AlistairMcIlgorm**

CONTENT                      needed more                      about right                      too much

LECTURER                      Poor                      Fair                      Good                      Excellent

**9.30- 9.45 MACs in Victoria. Responsibilities under the Act**

**TBA**

CONTENT                      needed more                      about right                      too much

LECTURER                      Poor                      Fair                      Good                      Excellent

**9.45-10.00 Responsibilities of a MAC Chairman**

**Marc Wilson**

CONTENT                      needed more                      about right                      too much

LECTURER                      Poor                      Fair                      Good                      Excellent

**10.45-11.15 Subject: Management**

**Alistair McIlgorm**

CONTENT                      needed more                      about right                      too much

LECTURER	Poor	Fair	Good	Excellent
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**11.15-11.45 The processes of Government and management planning.**

**Marc Wilson**

CONTENT	needed more	about right	too much
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LECTURER	Poor	Fair	Good	Excellent
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**1300-13.45: Fisheries Research and Stock Assessment**

**Marc Wilson**

CONTENT	needed more	about right	too much
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LECTURER	Poor	Fair	Good	Excellent
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**13.45-1430: Subject: Fisheries Property Rights and Resource Access**

**Alistair McIlgorm**

CONTENT	needed more	about right	too much
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LECTURER	Poor	Fair	Good	Excellent
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**14.45-15.30: Subject: Fisheries Economics**

**Alistair McIlgorm**

Policy and issues, regulating the industry, sustainability

CONTENT	needed more	about right	too much
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LECTURER	Poor	Fair	Good	Excellent
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**Saturday**

**8.45 - 9.45: Subject: Risk assessment in fisheries management**

**Marc Wilson**

Discussion: *Risk assessment in fisheries management.*

CONTENT	needed more	about right	too much
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LECTURER	Poor	Fair	Good	Excellent
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**9.45- 10.30 Environmental instruments and the fishing industry.** **Alistair McIlgorm**  
 Discussion: *Environment, habitat and the fishing.*

CONTENT	needed more	about right	too much
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LECTURER	Poor	Fair	Good	Excellent
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**10.45-11.15 Subject: Fishing Technology and the Environment** **Marc Wilson & A.McIlgorm**  
 11.15-11.30 Discussion: *Environmentally friendly gear and bycatch management.*

CONTENT	needed more	about right	too much
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LECTURER	Poor	Fair	Good	Excellent
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**11.30-12.15 Subject: Conflict in Fisheries Management** **A.McIlgorm & M.Wilson.**  
 CONTENT needed more about right too much

LECTURER	Poor	Fair	Good	Excellent
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**13.30-14.30 Fisheries Management Plans & Industry Awareness** **A.McIlgorm and M.Wilson**  
 Discussion: *Communication / constituency/ and leadership within resource user groups.*  
 CONTENT needed more about right too much

LECTURER	Poor	Fair	Good	Excellent
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**14.30-15.00 Role of training: discussion, recommendations and closing summary.**

*Course Coordinator: Dr Alistair McIlgorm.*

**OVERALL COMMENTS**

**CONTENT**                      **needed more**                      **about right**                      **too much**

**Comments:** \_\_\_\_\_  
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**LECTURERS**                      **Poor**                      **Fair**                      **Good**                      **Excellent**

**Comments:** \_\_\_\_\_  
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## Appendix five:- Short course survey numerical and written comments results

		Lecturer				Grade %	Content			Index
		Poor	Fair	Good	Excellent		Too Much	About Right	Not Enough	
1	IC	0	0	21	0	75%	0	21	0	2.00
2	AM	0	1	15	5	80%	0	20	1	2.05
3	TL	0	1	14	4	79%	0	18	1	2.05
4	AM	0	2	16	3	76%	0	8	2	2.20
5	RH	0	4	15	1	71%	0	18	2	2.10
6	MW	0	1	19	1	75%	0	20	1	2.05
7	AM	0	0	14	6	83%	0	17	3	2.15
8	AM	0	0	16	3	79%	0	13	3	2.19
9	MW	0	1	14	5	80%	0	18	2	2.10
10	AM	0	1	13	6	81%	0	18	2	2.10
11	IC	0	0	13	8	85%	0	20	1	2.05
12	MW	0	0	7	1	78%	0	7	1	2.13
13	AM	0	1	15	4	79%	0	19	1	2.05
14	RP	0	2	14	5	79%	0	19	2	2.10
15	RP	0	3	15	3	75%	0	20	1	2.05
16	MT	0	0	7	13	91%	0	19	1	2.05
17	AM	0	1	19	1	75%	0	19	1	2.05
18	AM	0	2	16	2	75%	1	17	2	2.05
<b>% in each rating</b>		<b>0%</b>	<b>5%</b>	<b>76%</b>	<b>19%</b>		<b>0%</b>	<b>92%</b>	<b>8%</b>	
<b>Course lecturer average</b>						<b>80%</b>			<b>52%</b>	<b>2.08</b>

### Written Comments

#### Lecturers

Very good lecturing (\*6) Very professional and easy to follow and understand.  
 Kept control very well. Very good, more industry people need to present subjects.  
 For a first workshop very good. Have you any poor lecturers at AMC?  
 Congratulations to Ross Haldane, Ted Loveday and Robin Pike. Impressed by calibre of lecturers.  
 Surprised by ability of industry people to perform in this arena.  
 Clear and direct presentations-professional. Leaders in their field very good value.  
 Good choice of people. Very good, subjects were well directed and questions answered clearly and meetings well chaired. Well prepared and informative.  
 They have concerns for the fishing industry at the national level. Well presented written material.  
 Industry speaker provided useful information on way it is done in their state.  
 Spoke on a level that encouraged discussions across the table. Well versed-excellent material.

#### Course content

Course very good. I want to put my son on a course like this.  
 Very surprised by quality and appropriateness of the format.  
 Definately worth the time and effort of attending. First class networking and appreciation of talent in Australia. Need more time and depth. Use more case studies  
 Essential for improving the professional attitudes of MAC members  
 More content needed-environmentalist? Longer time needed to digest material.  
 I learnt so much and changed my attitude towards management and our future- in the first time in years  
 I can see that maybe we have one. Probably more case studies.  
 Needs refining by providing a total understanding of what is the required gain.  
 Very useful information to take back to my particular fishery.

#### Lecturers

AM-Alistair McIlgorm, MW-Marc Wilson, TL- Ted Loveday, IC Ian Cartwright, SE-Steve Eayrs,  
 RP-Robin Pike, RH- Ross Haldane

**Townsville Nov. 1996**

		Lecturer				Grade %	Content			Index
		Poor	Fair	Good	Excellent		Too Much	About Right	Not Enough	
1 AM	What is a mac course	0	0	7	1	78%	1	6	1	2.00
2 AM	Review of states	0	0	7	1	78%	1	6	1	2.00
3 MW	Responsibilities of a MAC member	0	0	7	1	78%	1	6	1	2.00
4 AM	Management	0	1	6	1	75%	0	8	0	2.00
5 MW	Process of government	0	1	6	1	75%	0	8	0	2.00
6 MW	Fish. research & stock assessment	0	1	5	2	78%	0	7	1	2.13
7 AM	Fisheries property rights	0	1	5	2	78%	0	7	1	2.13
8 AM	Fisheries economics	0	1	5	2	78%	0	7	1	2.13
9 MW	Risk assessment	0	0	8	0	75%	1	7	0	1.88
10 AM	Environmental issues	0	4	3	1	66%	1	7	0	1.88
11 MW	Fishing Technology & environment	0	4	3	1	66%	1	7	0	1.88
12 MW	Conflict and fisheries Management	0	0	7	1	78%	0	7	1	2.13
13 AM	Fisheries management plans	0	0	7	1	78%	0	7	1	2.13
<b>% in each rating</b>		<b>0%</b>	<b>13%</b>	<b>73%</b>	<b>14%</b>	<b>75%</b>	<b>6%</b>	<b>87%</b>	<b>8%</b>	<b>2.02</b>
<b>Course lecturer average</b>									<b>50%</b>	

**Written Comments**

**Lecturers**

The level of expertise and sound advice based on research and experience was very evident  
The lecturers had clear ideas on how to improve fisheries management.

Much appreciated. Handouts very good. A lot of relevant information

This courses needs a wider audience and hopefully will retain it freshness in presentation and the interaction between presenters. Well presented in simple terms easily understood: promoted informative discussion.

**Course content**

Great, worthwhile and highly relevant. Offer this to all MAC/ZAC members!

Send all MAC/ZAC members-compulsory! Very worthwhile. Excellent content

More industry reps needed, more DoE reps and where are QFMA? More Notice?

More people form other sectors needed. Very worthwhile.

This has been one of the most worthwhile courses I have ever attended in 16 years of experience.

Wider range of groups needed. Very worthwhile, very informative,

Gave understanding of international factors and how industry and management interact

Well worth time as it was a lot better than I expected . More of these courses would make it better between the fishing industry and fisheries managers.

**Lecturers**

AM-Alistair McIlgorm, MW-Marc Wilson.



**Brisbane, Nov. 1996.**

		Lecturer				Grade %	Content			Index
		Poor	Fair	Good	Excellent		Too Much	About Right	Not Enough	
1 AM	What is a mac course	0	0	6	1	79%	1	5	1	2.00
2 AM	Review of states	0	0	6	1	79%	1	5	1	2.00
3 PC	Responsibilities of a MAC member	0	2	3	2	75%	0	7	0	2.00
4 BM	Responsibilities of a MAC chairman	0	2	9	3	77%	2	11	1	1.93
4 AM	Management	0	2	3	2	75%	0	7	0	2.00
5 MW	Process of government	0	1	4	2	79%	0	7	0	2.00
6 MW	Fish. research & stock assessment	0	1	4	2	79%	0	5	2	2.29
7 AM	Fisheries property rights	0	0	2	5	93%	0	5	2	2.29
8 AM	Fisheries economics	0	0	2	5	93%	0	7	0	2.00
9 MW	Risk assessment	0	0	5	2	82%	0	7	0	2.00
10 AM	Environmental issues	0	0	5	2	82%	0	5	2	2.29
11 MW	Fishing Technology and environment	0	0	5	2	82%	0	5	2	2.29
12 MW	Conflict and fisheries Management	1	4	9	1	67%	0	5	2	2.29
13 AM	Fisheries management plans	0	1	3	3	82%	0	7	0	2.00
	<b>% in each rating</b>	<b>1%</b>	<b>12%</b>	<b>58%</b>	<b>29%</b>		<b>4%</b>	<b>84%</b>	<b>12%</b>	
	<b>Course lecturer average</b>					<b>80%</b>			<b>52%</b>	<b>2.10</b>

**Written Comments**

**Lecturers**

I have found it a pleasure to have worked with the lecturers. They gave a lot of information whilst keeping an open mind with regard to our suggestions.

Good lecturing. Lecturers very good (\*3)

**Course content**

Worthwhile sessions. The review of items covered and the time was appropriate.

Useful material and discussions.

Our breakdown at MACs and ZACs seems to be in expertise. All MAC/ZAC members should go on this course (QFMA funded)

**Lecturers**

AM-Alistair McIlgorm, MW-Marc Wilson, PC- Phil Cadwallader, BM- Bill Mitchell.

**Victoria May 1997.**

		Lecturer				Grade %	Content			Index
		Poor	Fair	Good	Excellent		Too Much	About Right	Not Enough	
1 AM	What is a mac course	1	1	10	2	73%	2	8	1	1.91
2 AM	Review of states	1	2	9	2	71%	1	9	0	1.90
3 MW	Responsibilities of a MAC member	0	5	9	0	66%	1	6	0	1.86
4 AM	Management	0	4	7	1	69%	0	8	0	2.00
5 MW	Process of government	0	2	7	4	79%	0	9	1	2.10
6 MW	Fish. research & stock assessment	0	1	11	4	80%	0	10	2	2.17
7 AM	Fisheries property rights	1	1	8	6	80%	1	8	3	2.17
8 AM	Fisheries economics	1	4	8	2	68%	3	7	1	1.82
9 MW	Risk assessment	0	3	8	4	77%	1	10	1	2.00
10 AM	Environmental issues	1	2	8	3	73%	2	7	2	2.00
11 MW	Fishing Technology and environment	0	3	11	1	72%	1	11	0	1.92
12 MW	Conflict and fisheries Management	1	4	9	1	67%	1	8	2	2.09
13 AM	Fisheries management plans	0	1	9	1	75%	1	6	1	2.00
	<b>% in each rating</b>	<b>3%</b>	<b>18%</b>	<b>62%</b>	<b>17%</b>		<b>10%</b>	<b>79%</b>	<b>10%</b>	
	<b>Course lecturer average</b>					<b>73%</b>			<b>50%</b>	<b>1.99</b>

**Written Comments**

**Lecturers**

Good-made sessions interesting- had breaks and spoke in language we understood. I found the course most valuable. Thanks to all who put it together and presented it. The most interesting sessions were those when free discussion ensued on particular issues. Need to be clearer on what clients should take away from each session. At times I found it difficult to synthesise and digest and isolate key points. All subjects were well presented informative, and delivered in an interesting and entertaining manner. Reasonable presentation given poor environment-(room). Please cease from saying exploitation-usage better. If I had had teachers like you both when I was a school, I would have stayed there longer!

**Course content**

Sessions interesting and gave another view on managing our industry. The course has shown how complex fishing is, the problems with it, and the external issues that may affect us. It would be more efficient to assemble fishers as a group (abalone for issues in that sector) I enjoyed the course, but it was a lot to take in over two days. Audience brought great knowledge. Some topics not relevant to my fishery. Suggest forum to set agenda topics which clients want. This course is needed by fisheries managers. It is a worthwhile course. Thought subject matter was very good. Interesting and informative to see them presented, and to have group discussions. Most enjoyable two days. Well balanced course. Great teachers.

**FRDC A Workshop June 1995.**

	Poor	Fair	Good	Excellent	Grade %	Too Much	About Right	Not Enough	Index
1 AM Common property	0	2	7	4	79%	0	15	0	2.00
2 MT International law and treaties	0	0	8	7	87%	0	15	0	2.00
3 MT Native title	0	0	8	7	87%	0	12	3	2.20
4 MT UNCLOS 3	0	0	8	7	87%	1	13	1	2.00
5 MT Fisheries legislation	0	1	7	4	81%	0	12	2	2.14
6 IC Gear technology for administrators	0	0	1	14	98%	0	12	3	2.20
7 IC Gear technology for administrators	0	0	1	14	98%	0	12	3	2.20
8 AM Fisheries economics	0	3	7	5	78%	5	10	0	1.67
9 AM Fisheries economics II	0	1	12	1	75%	1	14	0	1.93
10 AC Fisheries Biology	0	11	4	0	57%	1	10	4	2.20
11 AC Fisheries Biology	0	9	5	0	59%	0	9	5	2.36
12 MH Politics and fisheries	0	2	9	3	77%	0	13	1	2.07
13 AM Managing Marine resources	0	0	11	3	80%	0	11	4	2.27
14 MW Fishing industry.	2	1	7	3	71%	0	11	4	2.27
15 MW Computer simulation	5	4	4	2	55%	3	6	5	2.14
16 DR Fishing ind. and Fish. managers	0	2	11	2	75%	0	12	3	2.20
17 JS Recreational fisheries	2	6	7	0	58%	4	8	3	1.93
18 AM Ecol. sustainable development	1	1	12	0	70%	0	14	1	2.07
19 PH Enforcement & Compliance	0	1	8	6	83%	0	14	1	2.07
20 PH Enforcement & Compliance	0	1	7	6	84%	0	14	0	2.00
21 MW Aquacultural policy	2	5	6	2	63%	1	12	2	2.07
22 IC Fish. technology and environment	0	0	4	11	93%	0	14	1	2.07
<b>% in each rating</b>	<b>4%</b>	<b>16%</b>	<b>49%</b>	<b>32%</b>		<b>5%</b>	<b>81%</b>	<b>14%</b>	
<b>Course lecturer average</b>				<b>19%</b>	<b>77%</b>			<b>52%</b>	<b>2.09</b>

**Written Comments**

**Lecturers**

In general lecturers presented very well. Overall very good holding interest on topics Really interesting enforcement lecturer. More local fisheries management examples needed. Most were great presenters and an interesting variety Easy to listen to-Accepted feedback, criticism etc.

Interesting and well presented course. Excellent-once you became used to the lecturing environment. Personality plays a big role in keeping people interested Need to listen to what participants say on occasions-may have more knowledge and experience in some areas! -overall very good.

**Course content**

Computer modelling was poorly organised and was little practical value Program covered a wide range of topics well. Industry views very valuable and should be increased. I found the course very informative and invaluable in progressing my understanding of fisheries management. More gear technology and biology A lot of material crammed in 10 days, but not boring. Interesting and well presented course. More fisheries examples than SBT. A good insight into managerial aspects of fisheries. A well organised course-I gained a lot. Include more recreational and commercial conflict Very good course. Gear technology, law, enforcement, economics were all handled very well. Biology could have been better.

**Lecturers initials**

AM-Alistair McIlgorm, MW-Marc Wilson, IC - Ian Cartwright, MH - Marcus Haward, DR - Dary Ross, JS - John Smith, AC - Albert Caton.

<b>FRDC A Workshop June 1996.</b>		Poor	Fair	Good	Excellent	Grade %	Too Much	About Right	Not Enough	Index
1 AM	Common property	0	1	12	8	83%	1	19	1	2.00
2 MT	Int law and treaties	0	0	4	17	95%	1	20	0	1.95
3 MT	Native title	0	0	8	13	90%	0	17	4	2.19
4 MT	UNCLOS 3	0	0	5	16	94%	1	20	0	1.95
5 MT	Fisheries legislation	0	0	11	10	87%	0	18	3	2.14
6 SE	Gear technology for administrators	0	9	11	0	64%	0	16	5	2.24
7 SE	Gear technology for administrators	0	6	14	1	69%	4	14	3	1.95
8 AM	Fisheries economics	0	2	16	2	75%	3	16	2	1.95
9 AM	Fisheries economics II	0	0	14	7	83%	1	18	2	2.05
10 MW	Fisheries Biology	0	2	11	7	81%	3	14	4	2.05
11 MW	Fisheries Biology	0	2	16	3	76%	5	14	2	1.86
12 MH	Politics and fisheries	0	6	11	4	73%	1	17	3	2.10
13 AM	Managing marine resources	0	0	17	4	80%	0	19	2	2.10
14 MW	Fishing industry.	0	2	10	9	83%	0	20	1	2.05
15 MW	Computer simulation	1	4	15	1	69%	2	14	5	2.14
16 BM	Fishing ind. and Fish. managers	0	0	12	9	86%	0	21	0	2.00
17 CB	Recreational fisheries	3	9	7	2	60%	0	15	6	2.29
18 MH	Ecol Sustainable development	1	8	11	1	64%	1	14	3	2.11
19 AP	Enforcement & Compliance	0	8	11	2	68%	5	14	2	1.86
20 AP	Enforcement & Compliance	0	6	14	1	69%	3	16	2	1.95
21 MW	Aquacultural policy	0	0	17	4	80%	0	21	0	2.00
22 SE	Fish. technology and environment	2	1	16	2	71%	1	16	4	2.14
<b>% in each rating</b>		<b>2%</b>	<b>14%</b>	<b>57%</b>	<b>27%</b>		<b>7%</b>	<b>81%</b>	<b>12%</b>	
<b>Course lecturer average</b>					<b>19%</b>	<b>77%</b>			<b>51%</b>	<b>2.05</b>

#### Written Comments

##### Lecturers

The quality and vast experience of lecturers is excellent. Excellent lecturing-more breaks. What can I say- excellent!. Excellent, given me more appreciation of fisheries management. All very good. After 2 weeks I have gained knowledge that will take me two years to absorb. All involved with the course should be thanked & congratulated-Wonderful stuff. Lecturers to be congratulated for style and content. More women presenters needed. Inadequate recreational session. Vary presentation styles, research needed on some areas. Discussions on management were excellent. Very good lecturers.

##### Course content

A great course, well done. More enforcement matters discussed. By far the most enjoyable and informative course I ever attended. Great networking. Course structure good, more time needed for difficult subjects-economics, biology, politics. More case studies, need all papers before lectures. An opportunity to reappraise what we do. I would prefer more biology and less gear technology. Essential training for fisheries agencies. This course is excellent. Learnt heaps, but need basic fish biology, more fishery case studies. More information on internal scene-examples of well managed fisheries if they exist! Odd that states are not aware of what each other are doing!-such is life! Some parts could be condensed, more on law and management techniques. Could include presentation skills. More marine ecology, too much gear technology? Fantastic!! More policy/management plan discussions. Politics/ESD could be less academic. Content was good.

##### Lecturers initials

AM-Alistair McIlgorm, MW-Marc Wilson, CB-Colin Buxton, SE-Steve Eayrs, MH-MarcusHaward, MT-Martin Tsamenyi, AP- Adrianna Pinnock, BM -Brett McCallum

## FRDC A Workshop June 1997

	Poor	Fair	Good	Excellent	Grade %	Too Much	About Right	Not Enough	Index	
1 SB Common property	0	1	8	6	83%		1	14	0	1.93
2 MT Int law and treaties	0	0	6	9	90%		1	14	0	1.93
3 MT native title	0	1	4	10	90%		0	14	1	2.07
4 MT UNCLOS 3	0	0	6	9	90%		0	14	0	2.00
5 MT Fisheries legislation	0	0	6	9	90%		0	14	0	2.00
6 SE Gear technology for administrators	0	0	6	9	90%		0	13	1	2.07
7 SE Gear technology for administrators	0	0	4	10	93%		0	13	1	2.07
8 SB Fisheries economics	0	0	7	8	88%		0	14	1	2.07
9 AM Managing marine resources	0	0	7	5	85%		0	11	1	2.08
10 MW Fisheries Biology	0	0	12	3	80%		1	11	2	2.07
11 MW Fisheries Biology	0	2	9	3	77%		1	12	0	1.92
12 MH Politics and fisheries	0	9	5	1	62%		1	7	4	2.25
13 AM Managing marine resources II	0	1	6	7	86%		0	14	0	2.00
14 AM Env. Ins. and fisheries man.	0	1	7	4	81%		1	7	2	2.10
15 MW Computer simulation	1	4	9	1	67%		8	6	1	1.53
16 KC Fishing ind. and Fish. managers	1	1	8	1	70%		0	11	1	2.08
17 CB Recreational fisheries	0	1	6	7	86%		0	9	5	2.36
18 AM Ecol. Sustainable Development	0	2	7	4	79%		1	10	1	2.00
19 MS Enforcement & Compliance	3	7	2	1	52%		4	5	3	1.92
20 MS Enforcement & Compliance	2	7	3	0	52%		1	7	2	2.10
21 MW Aquacultural policy	0	3	6	6	80%		1	11	3	2.13
22 SE Fish. technology and environment	0	0	5	9	91%		0	13	1	2.07
<b>% in each rating</b>	<b>2%</b>	<b>13%</b>	<b>45%</b>	<b>40%</b>			<b>7%</b>	<b>83%</b>	<b>10%</b>	
<b>Course lecturer average</b>				<b>20%</b>	<b>80%</b>				<b>51%</b>	<b>2.03</b>

### Written Comments

#### Lecturers

The lecturers with all but a few exceptions were excellent. Presentations good to excellent.

Lecturers were enthusiastic (\*5!) Enforcement lecturer poor. More interaction on issues relevant to the workplace needed. Get someone with knowledge in Australian compliance?

Best topics were those with enough time to go through at sensible pace (notes, video etc).

Need to have a break each hour. 8-9 hrs per day can be long. Variety is good.

Good balance except compliance area. Appreciated involvement of NZ agency-should continue.

Course organisation was good. Thankyou all AMC staff-supportive and helpful.

Perhaps some team building exercises would help.

#### Course content

Subject matter almost overwhelming. I haven't had a lot of exposure to management subjects. More exercises would have been appreciated. Overall subject mix good.

Too much stock assessment and enforcement. More reference to Australian fisheries required.

This was an excellent course and very relevant for fisheries management. Very good, last 2 weeks has been worthwhile. Have learnt much from lecturers and discussion sessions.

More cohesion between materials and lecturers. An introduction session first thing would help.

Information and technology session could be included. Flume tank and trawler were great.

Law and politics most interesting. More open debate and discussion would be good.

Less compliance-more gear technology.

#### Lecturers initials

AM-Alistair McIlgorm, MW-Marc Wilson, CB-Colin Buxton, SE-Steve Eayrs, SB-Shekar Bose,

MS-Mike Sullivan, MH-MarcusHaward, MT-Martin Tsamenyi

KC-Karen Clifton

FRDC B Workshop March 1996		Lecturer				Content				
Lecturer		Poor	Fair	Good	Excellent	Grade %	Too Much	About Right	Not Enough	Index
1 AM	Introduction to Workshop	0	0	8	1	78%	0	6	1	2.14
2 AM	Economic issues in Prop Rights	0	0	8	1	78%	0	9	0	2.00
3 MT	Legal issues in property rights	0	0	5	4	86%	0	8	1	2.11
4 MT	Indigenous issues	0	0	5	4	86%	0	9	0	2.00
4 MW	Fisheries management plans	0	1	5	3	81%	0	9	0	2.00
5 MA	Private fishing rights NZ Scallop	0	0	5	4	86%	0	8	1	2.11
6 RM	US Fishery management	0	1	5	3	81%	0	7	2	2.22
7 RM	Fishery restructuring mechanisms	0	2	6	1	72%	0	6	3	2.33
7 AM	Int. Environmental instruments	0	0	7	2	81%	0	9	0	2.00
8 MW	Coastal Zone planning	0	2	5	1	72%	0	5	1	2.17
9 CB	Management of SA recreational fish.	0	0	3	5	91%	1	6	1	2.00
10 CB	Marine Park Refugia	0	0	6	3	83%	0	8	0	2.00
11 JR	GBRMPA	0	0	7	1	78%	1	5	0	1.83
12 JR	Effects of fishing	0	0	6	2	81%	0	6	0	2.00
<b>% in each rating</b>		<b>0%</b>	<b>6%</b>	<b>64%</b>	<b>30%</b>		<b>1%</b>	<b>89%</b>	<b>10%</b>	
<b>Course lecturer average</b>						<b>81%</b>			<b>52%</b>	<b>2.09</b>

### Written Comments

#### Lecturers

All lecturers were really good-up to their excellent standard- at least you guys know what you're on about. The lecturers had clear ideas on how to improve fisheries management. Some things were left up in the air and could have been drawn together better. Lecturers were interesting and generated discussion. Discussion sometimes lacked direction. Lecturers approachable and stimulated lots of debate. Very enjoyable, good, well prepared.

#### Course content

Plenty of discussion on property rights and fisheries management. Workshop worked well Content well balance, contemporary and cutting edge. Learned a lot of other states through interactive discussions and presentations. Content was relevant and it was good to get a national perspective-networking was important. Topics could be even more specific. Good topics, discussions could be more focussed and participants given clearer direction on their presentations. The course has been extremely beneficial to my work in fisheries management. The presentation was extremely useful & made people participate. Generally good, lost context at times. More pre-course information so as participants can bring their states position to the debate. Numbers are sometimes too small for good discussion. 14-16 required? Very useful course thankyou.

#### Lecturers initials

AM-Alistair McIlgorm, MW-Marc Wilson, CB-Colin Buxton, SE-Steve Eayrs, SB-Shekar Bose, MA-Mike Arbuckle, RM-Rebecca Metzner, IC-Cartwright, MH-MarcusHaward, MT-Martin Tsamenyi JR- John Robertson.

## FRDC B Workshop April 1997

		Lecturer				Grade %	Content			Index
		Poor	Fair	Good	Excellent		Too Much	About Right	Not Enough	
1 AM	Introduction to Workshop	0	0	8	1	78%	0	6	1	2.14
2 AM	Economic issues in Prop Rights	0	0	9	0	75%	0	6	2	2.25
3 MT	Legal issues in property rights	0	0	5	4	86%	0	7	1	2.13
4 AM	Fisheries management plans	0	0	7	0	75%	0	6	1	2.14
5 MH	Fisheries co-management	1	4	4	0	58%	0	3	3	2.50
6 PR	National fisheries adjustment	0	2	7	0	69%	1	7	1	2.00
7 AM	Int. Environmental instruments	0	1	7	1	75%	0	7	1	2.13
8 MW	Precautionary principle	0	2	4	3	78%	0	9	0	2.00
9 CB	Marine Park Refugia	0	0	6	3	83%	0	8	0	2.00
10 MW	Coastal Zone planning	0	3	4	2	72%	0	9	0	2.00
	<b>% in each rating</b>	<b>1%</b>	<b>14%</b>	<b>69%</b>	<b>16%</b>		<b>1%</b>	<b>86%</b>	<b>13%</b>	
	<b>Course lecturer average</b>					<b>75%</b>			<b>53%</b>	<b>2.13</b>

### Written Comments

#### Lecturers

Very good, well presented sessions. More time was needed on several subjects.

Need to stretch the participants more-develop key issues and not just lecture.

High standard of lecturing. Group was right size for discussions.

Very happy with the input from lecturers.

Workshop atmosphere was relaxed, stimulating and productive.

#### Course content

Excellent focus on case studies and real issues in fisheries management.

Range of subjects was relevant and appropriate. Int conventions and property rights worthy of more discussion. The course could be condensed (3 days). We opened topics and could have gone further but did not return to them. The quality of presentations varied substantially.

Got a lot of benefit from the presentations-correct time was allocated to this.

On big picture sessions, more overview required and then more in depth.

Basically an excellent course, with time for discussions and no information overload.

About right apart for co-management - perhaps more emphasis on how to get co-management to work could be useful. More time on specific issues needed to get to the core of the issues.

Presentations and subjects lectured well linked. A very good course which really focussed on the type, urgency and nature of issues which will be focused on in the next 5-10 years.

The concept of theme each day worked well during the first 2-3 days of the course.

The last 2 days wandered too much.

#### Lecturers initials

AM-Alistair McIlgorm, MW-Marc Wilson, CB-Colin Buxton, WN, Warwick Nash, PR-Peter Rawlinson, MH-MarcusHaward, MT-Martin Tsamenyi