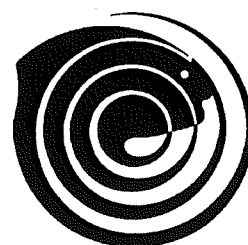
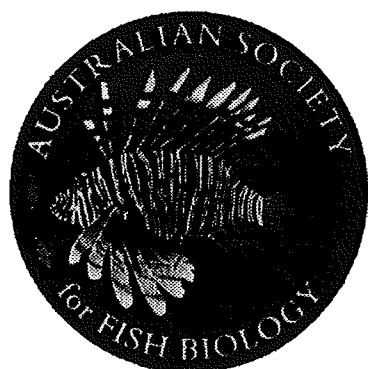


3 MAR 1999

**Australian Society for Fish Biology Annual  
Workshop  
“Taking Stock: Defining and Managing  
Shared Resources”  
Darwin 15-16 July 1997**

*RK Griffin*



**FISHERIES  
RESEARCH &  
DEVELOPMENT  
CORPORATION**

**Project No. 97/334**

## Table of Contents

<b>Topic</b>	<b>Page</b>
Non-Technical Summary	i-ii
Background	1
Objectives	2
Methods	2
Results/Discussion	4
Benefits	18
Further Development	27
References	29
Appendix 1: Intellectual Property	27
Appendix 2: Staff	28

**PRINCIPAL INVESTIGATOR:** Mr RK Griffin

**ADDRESS:**

NT Dept of Primary Industry and Fisheries

GPO Box 990

Darwin NT 0801

Telephone: 08 89244166 Fax: 08 89813420

Email: roland.griffin@nt.gov.au

**OBJECTIVES:**

To provide, by a national workshop and proceedings publication, benchmark information for defining, assessing and managing shared fishery resources for Australian fishery researchers, managers and stakeholders.

**NON TECHNICAL SUMMARY:**

**Australian Society For Fish Biology (ASFB) Annual Workshop**

The 12 th annual ASFB Workshop was held in Darwin on 15,16 July 1997. The theme of the workshop was:

**Taking Stock: Defining and managing shared resources.**

A total of 166 people from around Australia and from overseas attended. For the first time the annual workshop was held in conjunction with the newly formed Fisheries and Aquatic Resource Managers Association of Australasia (FARMAA). The choice of theme was made with this joint participation in mind. Approximately 30 of the 166 workshop participants were managers and 16 were students. In recognition of the likely industry interest in the topic provision was made in the workshop budget to fund registration for two fishing industry representatives from each state. Only six industry representatives took advantage of this offer.

The workshop format was different to that of previous years. Instead of a series of focussed presentations on the theme with discussion following, a true "workshop" format was implemented. Three keynote speakers, each supported by one or two speakers presenting case studies, expounded on one aspect of the theme and then posed a number of questions pertinent to the subject. These questions were then discussed at length by the assembled participants in ten groups. Each of these groups then reported the outcome of their discussion to the whole audience. In this way issues were addressed in a multi-disciplinary manner within the groups comprised of researchers, managers, industry representatives and even a couple of politicians.

Three very well qualified and respected keynote speakers, funded by FRDC were engaged for the workshop. They were Dr John Dean (University of South Carolina), Dr John Caddy (FAO Fishery Resources) and Dr Carl Walters (Fisheries Centre, University of British Columbia). Two of the original keynote speakers named in the application were unable to attend. They were Dr Serge Garcia, FAO Director of Fishery Resources, who was replaced

by his deputy, John Caddy, and Dr Daniel Pauly who was replaced at relatively short notice, by John Dean. All three keynote speakers provided very stimulating overviews and contributed greatly to the ensuing discussions.

The workshop centred on three themes:

“What is a Stock?” - covered definitions of “stock” the various means by which stocks are defined. Keynote Speaker – Dr John Dean.

“Stock Assessment and Research.” Explored in depth the stock assessment implications of knowing or not knowing stock boundaries. Keynote Speaker – Dr Carl Walters

“Management and Allocation of Shared Stocks” Focussed on, requirements, strategies and mechanisms for equitable and sustainable resource allocation. Keynote Speaker – Dr John Caddy.

Another innovation at this workshop, was the concept of student awards aimed at increasing the involvement of students in the workshop and introducing them to the field of fish research and fisheries management. Students were invited to submit, posters, papers or essays on the workshop subject, with the best three receiving reimbursement of travel costs and a \$300 cash award, provided by FRDC. Because this was a new and not widely known concept the number of student contributions was disappointing. However, the three contributions which were received were all of a very high standard and three awards were given. The students were presented with their awards at the workshop by the FRDC representative, Alex Wells. With further publicity the concept of student awards is one which is worthy of continuation depending on the subject and format of future workshops.

The workshop proceedings, including all of the presented papers and summaries of the extensive discussions, has been prepared for publication by ASFB’s Proceedings Editor, Dr Don Hancock. The Proceedings document was printed and released in September 1998. Copies have been distributed to all Workshop participants.

**KEYWORDS:** ASFB, Australian Society for Fish Biology, Stock Definition, Management, Resource allocation.

## **BACKGROUND**

The Australian Society for Fish Biology (ASFB) has taken the lead in encouraging international scientific links in fisheries research and management in Australia. Through the generous support of FRDC and State and Territory fishery agencies, ASFB has hosted a national workshop series since the early 1980's, usually with eminent overseas scientists presenting keynote addresses on the major themes. Increasingly, overseas scientists and managers have also begun to attend these workshops as their reputation has spread. The purpose of these workshops is to:

- ◆ Promote the opportunity for the national fisheries expertise to focus on a technical area or subject of current or perceived national or regional significance – such area or subject to be identified by the membership of the society or by the Council, as appropriate;
- ◆ Support, where appropriate, visiting fisheries scientists of acknowledged expertise in the workshop subject area to offer a national or international perspective;
- ◆ Assist in the publication of workshop proceedings as a benchmark document of current knowledge in the workshop subject area; and
- ◆ Identify and define research questions of national fisheries significance.

Fisheries managers from the various fisheries agencies around Australia, New Zealand and the South Pacific, have also worked to bring senior and junior managers, industry and students together under a workshop style arrangement each year to address a key management issue from a national and international perspective. Workshops have been held each year since 1993. International experts are invited to guide the deliberations for workshop and outcomes are printed and forwarded to participants, agencies and tertiary institutions training fisheries managers so that these might be used as reference and training material. In 1996 fisheries managers formed the Fish and Aquatic Resource Managers Association of Australia (FARMAA). Membership is drawn from those people interested or involved in any of the processes of sustainable fisheries and aquatic resource management.

Members of ASFB and FARMAA collaborated to facilitate interactions between the managers and researchers through a joint workshop in Darwin.

## **NEED**

Unlike rules in the worlds in which fish live, those in the world of fishery resource management are shaped by government jurisdiction and maritime boundaries, and influenced by political whim. Human conflicts often arise when fish cross 'invisible' lines. Our understanding of resource dynamics and management needs, and our ability to perceive and resolve conflict, may become clouded by fish-related activities in distant parts of a fish stock. What are fish stocks? Can stocks be contained within meaningful boundaries? And what are the implications of assessing resources and implementing management strategies if stocks are shared by many users, or if stock boundaries are not clearly known? Quantifying fish stocks, fishery resources and related activities is central to formulating strategies for ecologically sustainable

development and management. Taking Stock: Defining and Managing Shared Resources is a pivotal issue for many Australian fishery scientists and managers.

There are numerous examples of fisheries where management strategies are compromised by poorly understood and poorly quantified fish-related activities within the ecological range of the stocks. Conflict may arise at three scales: macro-scale between nations, meso-scale between states or provinces, and micro-scale between stakeholders within a jurisdiction. Examples where conflicts may arise include recreational fishing, taking of by-catch, traditional fishing, fishing on grounds adjacent to Australian waters, and habitat modifications. Each of these activities can, under certain circumstances, have detrimental effects on the wellbeing and sustainability of fish stocks.

The ASFB-FARMAA workshop is intended to bring together fishery scientists, managers and stakeholders to discuss methods for defining and managing stocks shared at macro, meso and micro scales. Discussion at all three scales will ensure that the workshop has wide appeal and relevance to participants. This workshop will advance our understanding of key issues, and provide benchmark information for future directions in fisheries research and management.

#### **OBJECTIVES:**

To provide, by a national workshop and proceedings publication, benchmark information for defining, assessing and managing shared fishery resources for Australian fishery researchers, managers and stakeholders.

#### **METHODS**

The 1997 joint ASFB-FARMAA workshop was held at the Northern Territory University, Darwin, on 15-16 July 1997, immediately preceding the annual ASFB conference (17-19 July). The 2-day workshop entitled "Taking Stock: Defining and Managing Shared Resources" addressed problems and issues in stock definition and management. Keynote and other invited speakers set the scene, posed questions and focussed discussion in three workshop sessions:

1. What is stock;
2. Stock assessment and research; and
3. Management and allocation of shared stocks.

Session 1 "What is a stock": addressed theoretical and practical aspects of defining fish stocks, including genetics, use of tagging and micro-chemistry techniques, taxonomy, and application of methods to determine geographic boundaries. Session 2 "Stock assessment and research": focussed on the assessment implications of knowing, or not knowing, the boundaries of stocks, and methodologies for gathering the required information. Session 3 "Management and allocation of shared stocks" brought together knowledge from the previous sessions, and discussed actual strategies and directions for managing and allocating shared resources.

The workshop was held in conjunction with the fourth annual meeting of fishery managers (now FARMAA), ensuring that the topics discussed during the workshop were comprehensively covered, from both research and management perspectives.

A total of 166 people participated in the workshop, including 30 managers, 16 students and 6 industry representatives. The venue included a large lecture theatre and 11 discussion rooms, all within 1-2 minute walk at the Northern Territory University Casuarina Campus.

The workshop was organised and managed by the local organising committee, chaired by Roland Griffin of the Fisheries Division. Other committee members were Rik Buckworth, Chris Calogeras, Ann Coleman, Darryl Grey, Tracy Hay, Rosemary Lea (president of FARMAA), Julie Lloyd, Ray Clarke and Rik Fallu of the Fisheries Division, and Helen Larson of the Museum and Art Gallery of the Northern Territory.

The workshop was run in true workshop format, a departure from previous ASFB workshops. A professional workshop facilitator (Kayt Raymond and Associates) was appointed to ensure the successful outcome of the workshop. Kayt Raymond and Associate had extensive experience running this style of workshop within the context of fisheries research and management.

The themes addresses over the 2-day period will be introduced by 3 keynote speakers:

- ◆ Dr John Dean – Director of Marine Science Program, University of South Carolina.
- ◆ Dr Carl Walters – Fisheries Centre, University of British Columbia – Session 2; and
- ◆ Dr John Caddy –Deputy Director of Fisheries Resources Division, Food and Agriculture Organisation – Session 3.

Travel expenses and workshop registration for Drs Dean and Caddy was provided by FRDC. Travel expenses and workshop registration for Dr Walters were funded by the NT Fisheries Division.

Each keynote speaker was followed by 1 or 2 case studies selected to provide topical national or local perspectives. Three special workshop awards, sought from FRDC, were made available to encourage students to provide input. Those awards will cover travel expenses and workshop registration, and were decided by the local organising committee on merit, based on topical papers submitted prior to the workshop. Details of these awards were made known through the ASFB and FARMAA newsletters and homepages. Funding to cover registration fees for two participating fishing sector stakeholders from each State and Territory provided by FRDC.

Following the keynote papers and case studies, workshop participants were split into 12 groups to resolve issues and concepts raised during the talks. The workshop facilitator, with the assistance of keynote speakers and other assistants drawn from

the ASFB and FARMAA memberships, assisted with the process, ensuring that issues discussed, and the workshop, remained on track. Following discussion, the groups came back together, and findings were summarised and further discussed by the keynote speaker and/or workshop facilitators. Rapporteurs documented the main aspects of the discussions.

Administration and registration for the workshop and ASFB conference was done through a professional convention organiser (Convention Catalysts International, appointed November 1996), under the supervision of the local organising committee. The cost of hiring the convention organiser was funded through a grant of \$10K provided by the Fisheries Division, and workshop and conference registration fees.

The workshop proceedings publication was organised by ASFB editor Dr Don Hancock, with secretarial assistance from the NT Fisheries Division. It contains all the papers by keynote and case study speakers, reports on the discussions, and workshop findings

## **RESULTS AND DISCUSSION**

A total of 166 people from around Australia and from overseas attended. For the first time the annual workshop was held in conjunction with the newly formed Fisheries and Aquatic Resource Managers Association of Australasia (FARMAA). The choice of theme was made with this joint participation in mind. Approximately 30 of the 166 workshop participants were managers and 16 were students. In recognition of the likely industry interest in the topic provision was made in the workshop budget to fund registration for two fishing industry representatives from each state. Only six industry representatives took advantage of this offer.

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The workshop proceedings, including all of the presented papers and summaries of the extensive discussions, has been prepared for publication by ASFB's Proceedings Editor, Dr Don Hancock. The Proceedings document was printed and released in September 1998. Copies have been distributed to all Workshop participants.

## **BENEFITS**

All sectors of the industry participated in the workshop at some level and all will benefit from that participation. The Proceedings will form a very useful reference on the highly topical and vexing issues of stock definition and resource allocation. Managers and researchers from all states and the Commonwealth participated, ensuring a nationwide spread of benefits. The joint workshop concept, with managers and researchers discussing a major topic of common concern, was at least as successful as envisaged when the idea was conceived. Success of the joint workshop concept in the future will depend on the nature of the workshop topic.

## **REFERENCES**

Hancock, D.A. (ed) 1998. Taking Stock: defining and managing shared resources. Australian Society for Fish Biology and the Fish and Aquatic Resource Management association of Australasia Joint Workshop Proceedings, Darwin 15-16 June 1997. Australian Society for Fish Biology, Sydney.

FISHERIES RESEARCH AND DEVELOPMENT CORPORATION					
Statement of Receipts and Expenditure for the period ending 31 October 1998					
<b>Name of Research Organisation</b>		<b>FRDC Project Number</b>		<b>Title of Project</b>	
AUSTRALIAN SOCIETY FOR FISH BIOLOGY INC		97/334		Taking Stock: Defining and Managing Shared Resources A Joint ASFB - FARMAA Workshop	
Budget Summary					
Original Budget		1997/98			
Current Budget (2)		63225.00			
Summary of Receipts and Expenditure for the Project since commencement					
		1997/98	1998/99	1999/00	2000/01
Balance B/F					
FRDC Funds (Plus)		47418.00			
Expenditure (Minus)		-69141.73			
Refunds (3)					
Balance C/F		-21723.73			
Details Financial Year to 31 October 1998					
		Funds Available			
		Balance Brought Forward from previous year			
		Total funds received from FRDC during Financial Year 1997/98			47418.00
		Funds Available			47418.00
Allocation FY		Less Expenditure			
		Salaries		0	
	19575	Travel		23219.10	
	43650	Operating		45922.63	
		Capital			
		Refund			69141.73
<b>TOTAL</b>	<b>63225</b>	<b>Balance as at 31 October 1998</b>			<b>-21723.73</b>
Notes					
(1) Use this column for the final year ONLY regardless of the length of the project					
(2) Total current budget shall not exceed total, original budget without approval in writing from FRDC					
(3) Refunds should only be paid at the completion of the project together with the final audited statement					
(4) ACTUAL EXPENDITURE ONLY. Commitments shall not be included					
(5) Show allocation for the current financial year					
Comments:					
Some expenditure incurred during financial year 1998/99 is shown for 1997/98 to comply with formatting.					
Final FRDC payment of \$15806 still to come.					
Project now finalised. Publication and distribution of proceedings occurred in September 1998.					