

# WORKSHOP PROGRAMME

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## POPULATION DYNAMICS FOR FISHERIES MANAGEMENT

Convener: Norm Hall, Fisheries Department, W.A.

### Day 1 (Tuesday, 24 August, 1993)

- 0900-0915 Welcome - Dr Julian Pepperell, President, A.S.F.B.
- 0915-1000 Keynote address - Dr Chris Francis, M.A.F. Fisheries, Greta Point, P.O. Box 297, Wellington, N.Z.
- 1000-1030 Morning Tea
- 1030-1230 **SESSION 1: THE ROLE OF POPULATION MODELS IN MANAGING FISHERIES**
- Chairperson:* Jeremy Prince, Fisheries Consultant, W.A.
- Rapporteur:* Kevin Rowling, N.S.W. Fisheries
- Panel Speakers:*
- Kay Radway Allen, Fisheries Consultant, N.S.W., "A retrospective view of the historical development of fisheries modelling"
- Rick Fletcher, W.A. Fisheries, "Modelling, a method of setting research priorities, not just the tool of final analysis for Western Australian pilchards"
- Phillip Sluczanowski, Fish Insight, S.A. Research and Development Institute, "Fish Stock Accounts - Linking tough decisions and effective science"
- 1230-1330 Lunch
- 1330-1500 **SESSION 2: MODELLING - THE FISH OR THE ECOSYSTEM?**
- Chairperson:* Tony Smith, CSIRO Fisheries
- Rapporteur:* James Andrews, W.A. Fisheries
- Panel Speakers:*
- Des Lord, D.A. Lord and Associates, W.A., "Using ecosystem models for water quality management - the COASEC model for Perth's waters"
- Nic Bax, CSIRO Fisheries, "Estimation of natural mortality from ecological models"

Tony Koslow, CSIRO Fisheries, "A trophodynamic approach to the ecology of the mid-slope community off southeast Australia"

Tony Smith, CSIRO Fisheries, "The Jervis Bay model - rationale and approach"

1500-1530 Afternoon Tea

1530-1700 **SESSION 3: DATA REQUIREMENTS - HOW MUCH DO YOU NEED TO KNOW?**

*Chairperson:* David Smith, Victorian Fisheries Research Institute

*Rapporteur:* Patrick Coutin, Marine Science Laboratories, Victoria

*Panel Speakers:*

Neil Klaer, Bureau of Resource Sciences, Canberra, "Standardising effort"

David Smith, Victorian Fisheries Research Institute, "Getting the right information for age-structured models"

Jean Chesson, Bureau of Resource Sciences, Canberra, "Quality versus quantity: a case study"

Norm Hall, W.A. Fisheries, "Data requirements of multispecies, spatial, and ecosystem models"

1700-1730 **DISCUSSION OF DAY 1**

*Chairperson:* Jim Penn, W.A. Fisheries

*Rapporteur:* John Glaister, Q.D.P.I. Fisheries

*Panellists:* Session chairpersons

## **Day 2 (Wednesday, 25 August, 1993)**

0830-0900 Simon Pratley, Programs Manager, F.R.D.C., "Application procedure for 94/95 and the need for collaborative research"

0900-1030 **SESSION 4: CASE STUDIES I - INVERTEBRATES**

*Chairperson:* Nick Caputi, W.A. Fisheries

*Rapporteur:* Mike Moran, W.A. Fisheries

*Panel Speakers:*

Jeremy Prince, Fisheries Consultant, W.A., "Use of modelling in management of abalone fisheries"

Lindsay Joll, W.A. Fisheries, "Population dynamics of the Shark Bay saucer scallop fishery"

Geoff Gordon, N.S.W. Fisheries, "A compartmental yield per recruit model of the eastern king prawn fishery"

Norm Hall, W.A. Fisheries, "Modelling the western rock lobster fishery"

1030-1100 Morning Tea

1100-1230 **SESSION 5: CASE STUDIES II - FISH**

*Chairperson:* Rob Lewis, S.A. Research and Development Institute

*Rapporteur:* Keith Jones, S.A. Research and Development Institute

*Panel Speakers:*

Kevin Rowling, N.S.W. Fisheries, "Assessment of the gemfish stock using a "customised" age structured analysis"

Terry Walker, Victorian Fisheries Research Institute, "Stock assessment of Gummy Shark in Bass Strait"

Roland Griffin, N.T. Dept of Primary Industry and Fisheries, "Barramundi stock assessment"

John Harris, N.S.W. Fisheries, "Development of predictive models linking stream flow with population recruitment"

1230-1330 Lunch

1330-1530 **SESSION 6: MANAGEMENT ADVICE - THE PROCESS, THE RISK, AND THE UNCERTAINTY**

*Chairperson:* Richard Tilzey, Bureau of Resource Sciences, Canberra

*Rapporteur:* Vicki Wadley, CSIRO Fisheries

*Panel Speakers:*

Russell Reichelt, Bureau of Resource Sciences, Canberra, "Linkages between stock assessment and management"

Ian Somers, CSIRO Fisheries, "Interaction between scientists and industry in the Northern Prawn Fishery"

Tony Smith, CSIRO Fisheries, "Management strategy evaluation - the light on the hill"

Geoff Rohan, A.F.M.A., Canberra, "Management needs"

1530-1600 Afternoon Tea

1600-1700 **GENERAL DISCUSSION**

*Chairperson:* Derek Staples, Bureau of Resource Sciences, Canberra

*Rapporteur:* Gina Newton, Bureau of Resource Sciences, Canberra

*Panellists:* Session Chairpersons

1700-1730 **SUMMING UP**

Dr Chris Francis, M.A.F. Fisheries, Greta Point, P.O. Box 297, Wellington, N.Z.