



National Workshop on Research and Development Priorities of Stock Enhancement, Fish Stocking and Stock Recovery

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AUSTRALIA



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Development Corporation**

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National Workshop on Research and Development Priorities of Stock Enhancement, Fish Stocking and Stock Recovery

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Cover photograph: Fish such as this Barramundi attract many fishers to stocked impoundments

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Non technical summary

2005/323: National Workshop on Research and Development Priorities of Stock Enhancement, Fish Stocking and Stock Recovery

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OBJECTIVES:

1. Identify the key research, development and extension associated with finfish stock enhancement, fish stocking and stock recovery.
2. Publish the proceedings and a strategic paper on the research priorities identified at the workshop.

NON TECHNICAL SUMMARY:

OUTCOMES ACHIEVED TO DATE

The National Workshop held in Brisbane in February 2006 identified a number of priority areas for investment in research, development and extension for stock enhancement, fish stocking and stock recovery. These priorities have been published in a strategic document and the Workshop proceedings and researchers and others will be encouraged to develop projects that address those priorities.

An initial proposal from the Recfishing Research Steering Committee is being developed to understand the social and economic benefits of stocked impoundment fishing. It is likely that further projects to address these priorities will be developed by other researchers for the FRDC 2007/08 round.

Over the past few years FRDC had received a number of applications dealing with a range of issues in relation to fish stocking and stock enhancement. However there were no clear national priorities able to guide investment in research, development and extension. In September 2005 the FRDC approached the Recfishing Research Steering Committee to conduct a national workshop to identify the national priorities.

The scope of the workshop was determined to cover research, development and extension for stock enhancement, fish stocking and stock recovery and the workshop was hosted by the Department of Primary Industries and Fisheries in Brisbane in February 2006. The Murray Darling Basin Commission and Australian Bass Tournaments were supporters of the Workshop.

Participants in the workshop covered the full range of interests in the topic from State Government fisheries agencies, researchers, recreational fishing bodies, fish stocking groups and fishing media.

A strategic document and the proceedings of the workshop and were published in May with the priority areas for investment identified and the proceedings included the papers that were presented at the workshop.

KEYWORDS: Workshop, stock enhancement, fish stocking, stock recovery

Acknowledgements

Thanks go to the FRDC as the primary funders of the workshop with contributions also acknowledged from the Murray Darling Basin Commission and Australian Bass Tournaments.

The workshop was put together by a Steering Group comprising:

Bill Sawynok as the Principal Investigator
Ross Winstanley of Winstanley Fisheries Management Services Pty Ltd (workshop chair)
John Harrison of Recfish Australia
Matthew Barwick of Fisheries Research and Development Corporation
Terry Healy of Department of Primary Industries and Fisheries
Dean Ansell of Murray Darling Basin Commission
Greg Jenkins of Challenger TAFE

The detailed organising of the workshop was carried out by Rhonda Harrison and the workshop was chaired by Ross Winstanley.

Thanks also go to the Department of Primary Industries and Fisheries in Queensland for hosting the workshop and to Terry Healy for organising the venue.

Thanks also go to the workshop presenters and participants for their valuable contributions.

Background

Over the past few years FRDC had received a number of applications dealing with a range of issues in relation to fish stocking. However there were no clear national priorities to guide investment in research, development and extension. In September 2005 the FRDC approached the Recfishing Research Steering Committee to conduct a national workshop to identify the national priorities.

It was initially proposed to hold the workshop in Queenscliff in November 2005 however that did not eventuate and the workshop was held in Brisbane in February 2006 hosted by the Department of Primary Industries and Fisheries.

The scope of the workshop was finally determined to cover research, development and extension (RDE) for stock enhancement, fish stocking and stock recovery. The Murray Darling Basin Commission and Australian Bass Tournaments were also financial contributors to the Workshop. In the development of the workshop the inclusion of molluscs and crustaceans as well as fish was considered however it was finally limited to fish, primarily for logistic reasons.

Need

The need for advice to guide investment in research, development and extension relevant to stock enhancement, fish stocking and stock recovery was identified by the FRDC Board in mid 2005.

Objectives

The objectives of the workshop were:

1. Identify the key research, development and extension associated with finfish stock enhancement, fish stocking and stock recovery.
2. Publish the proceedings and a strategic paper on the research priorities identified at the workshop.

Methods

The workshop was managed by a Steering Group as identified in the acknowledgements. The workshop program is in Appendix 1 and the list of participants is in Appendix 2.

The workshop program commenced with a national overview, status reports from each of the States where stocking has occurred, presentations on some specific stocking events and studies that have occurred around Australia, a presentation on fish marking and another on alternatives to be considered before using the stocking option. This provided a good background for participants to identify the priority issues.

The second part of the workshop consisted of participants breaking into smaller groups to examine the priorities for marine stocking in estuaries, stocking in freshwater and stock recovery for threatened and endangered species. This resulted in a list of priority areas for investment being identified.

Results/Discussion

The proceedings of the workshop were published in May 2006 and are available in electronic format only. The proceedings can be downloaded at www.frdc.com.au or a copy can be obtained from Recfish Australia.

The broad indications of important future directions for stock enhancement RDE outlined during the workshop point to the following as major priority areas for FRDC and Recfish Australia:

- Experimental application of stock enhancement as a learning tool (ie adaptive management) for fisheries management, and for addressing factors that limit productivity of wild fish stocks.
- The development of decision support tools and information resources suited to community engagement in planning and implementation of stock enhancement programs.
- Improved understanding of the impacts of stocked fish on wild stocks.
- Social and market research to:
 - determine the full range of benefits sought by recreational fishers from enhanced fisheries; and
 - demonstrate the social and economic benefits provided by enhanced fisheries.
- Assessment of the impacts of fish stocking in terms of:
 - success in meeting fishery objectives and angler aspirations;
 - impacts on the environment; and
 - rehabilitating threatened species.

The Workshop also highlighted the importance of engaging recreational fishers and community groups from the planning to the implementation stages of stock enhancement programs – and shifting the focus from inputs (eg numbers of fish released) to outcomes (eg what type of fishery does the community want).

Workshop participants also noted that there is a need for stock enhancement planning and management to be integrated with fisheries and wider natural resource management frameworks. There is also a need to develop national protocols for fish stocking.

Benefits and adoption

The benefit of the workshop was to identify the key areas for investment in RDE for stock enhancement, fish stocking and stock recovery.

Further development

An initial proposal from the Recfishing Research Steering Committee is being developed to understand the social and economic benefits of stocked impoundment fishing. It is likely that further projects to address these priorities will be developed by other researchers for the FRDC 2007/08 round.

Planned outcomes

Better, more targeted investment in research and development relevant to stocking sustainable, valued and valuable fish resources.

Conclusion

The workshop was successful in identifying the priority areas for investment and the published proceedings of the workshop will be a valuable reference to researchers, fisheries managers and industry.

References

Moore A and Hughes R (2000): Australian Society for Fish Biology Workshop – Stock Enhancement of Marine and Freshwater Fisheries: Albury NSW 7-12 August 2000

Phillips, Bill (compiler) (2003): Managing Fish Translocation and Stocking in the Murray-Darling Basin Workshop: Statement, recommendations and supporting papers: Canberra ACT 25-26 September 2003

Intellectual property

There are no intellectual property issues associated with the workshop.

Staff

John Harrison, Recfish Australia
Bill Sawynok, Infofish Services

Appendix 1 – Workshop Program

WORKSHOP DATES

6-7 February 2006

WORKSHOP LOCATION

QDPIF Auditorium 1 DPIF Building 80 Ann Street Brisbane

WORKSHOP SCOPE

- Marine stock enhancement of fish species in estuaries
- Freshwater fish stocking in open systems and impoundments
- Stock recovery for threatened or endangered species

WORKSHOP OBJECTIVE

- Identify the key research, development and extension issues associated with stock enhancement, fish stocking and stock recovery

WORKSHOP PROGRAM

6 February 2006

CHAIR – Ross Winstanley

9.00am OPENING AND WELCOME Dan Currey on behalf of Deputy Director-General, Department of Primary Industries and Fisheries

9.10am WHAT THE WORKSHOP AIMS TO ACHIEVE/THE NEED FOR R&D GUIDANCE Patrick Hone FRDC

9.30am THE STATE OF PLAY NATIONALLY Ross Winstanley Wayne Fulton PIRVic

10.00am THE STATE OF PLAY IN MARINE FISH STOCK ENHANCEMENT Matt Taylor UNSW

10.20am MORNING TEA

10.40am THE STATE OF PLAY IN FRESHWATER FISH STOCKING Wayne Fulton PIRVic

11.00am THE STATE OF PLAY IN STOCK RECOVERY OF ENDANGERED OR THREATENED SPECIES Mark Lintermans ACT

11.20am FRESHWATER STOCKING IN QLD Anita Wohlsen DPIF

11.40am BLACK BREAM IN BLACKWOOD RIVER WA Greg Jenkins Challenger TAFE

12.00am FRESHWATER STOCKING IN NSW Cameron Westaway NSW DPI

12.20am LUNCH

1.00pm MULLOWAY IN NSW Matt Taylor UNSW

1.20pm FRESHWATER STOCKING IN VICTORIA Greg Hayes PIRVic

1.40pm STOCKING IN TASMANIA David Jarvis Tas Inland Fisheries

2.00pm BARRAMUNDI IN NORTH QUEENSLAND ESTUARIES John Russell DPIF

2.20pm GIPPSLAND LAKES BREAM Sandy Morison PIRVic

2.40pm MAROOCHY RIVER STOCKING Adam Butcher DPIF

3.00pm AFTERNOON TEA

3.20pm MURRAY COD/TROUT COD RECOVERY Simon Nicol ARI

3.40pm RESTOCKING SWAN RIVER Frank Prokop Recfishwest

4.00pm HABITAT RESTORATION Jim Tait Econcern

4.20pm OPTIONS FOR MARKING FISH David Crook Arthur Rylar Institute

4.40pm WHAT IS OUR AIM FOR TOMORROW? Ross Winstanley/Matt Barwick FRDC – Setting the scene for the second day

5.00pm Finish

7 February 2006

9.00am Commence

Break up into 3 workshop groups to address the research and development priorities in each of the 3 areas identified.

- Marine stock enhancement of fish species in estuaries
- Freshwater fish stocking in open systems and impoundments
- Stock recovery for threatened or endangered species

Action Items and what will happen after the workshop (Ross Winstanley)

12.00pm Finish and Lunch

Appendix 2 – List of Participants

<p>Marc Ainsworth Fishing Monthly Group PO Box 621 HAMILTON Qld 4007 vfmeditor@fishingmonthly.com</p>	<p>Dean Ansell Murray Darling Basin Commission GPO Box 409 CANBERRA ACT 2601 dean.ansell@mdbc.gov.au</p>	<p>Matthew Barwick Fisheries Research and Development Corporation PO Box 222 DEAKIN WEST ACT 2602 matthew.barwick@frdc.com.au</p>
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