

Recfishing Research

National Strategy for Recreational Fisheries Research, Development and Extension

w sawynok, r winstanley & l olyott



FRDC Project 2007/227



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National Strategy for Recreational Fisheries Research,
Development and Extension

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*REFISH
AUSTRALIA*



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ACKNOWLEDGEMENTS

The development of a strategy to improve national investment in recreational fisheries Research, Development and Extension (RDE) requires the support of a large number of groups and individuals. It is not possible to provide recognition to all those that have contributed as invariably someone will be missed. However it is important to recognise the key contributors.

The Fisheries Research and Development Corporation (FRDC) provided funding for establishment of Recfishing Research. This was done through project 2005/322 from August 2005 to June 2007. The FRDC then funded this project 2007/227 that has allowed the development of a national strategy. It has also provided conditional approval for project 2010/211 the next phase, addressing the national research and development priorities and improving extension. The support of FRDC has provided a significant opportunity to improve investment and the return on investment from research to address national priorities in recreational fisheries.

The development and implementation of a national strategy requires vision, an understanding of the complexities of the industry and its place in the community, the development of positive relationships with all stakeholders, an understanding of where to invest its limited resources and the ability to move forward. The Recfishing Research Steering Committee is comprised of members with a diverse range of expertise that provides it with an ability to understand the research needs to underpin the national issues facing the recreational fishing industry.

The Steering Committee has provided the strategic guidance that has allowed Recfishing Research to get to its current position. The members of the Steering Committee are included in this report however there are a number of members that are no longer on the Steering Committee that need to be acknowledged. These are Patrick Hone, Matt Barwick, Frank Prokop, Ian Brown, John Harrison, Jim Harnwell, Howel Williams, Bruce Schumacher, Graham Anderson and James Lee.

Having vision and funding support are not the only things that are required to develop and implement a national strategy. It requires the support of recreational fishers as without that the strategy would flounder. It is not possible to get the support direct from Australia's fishers, at least not within currently funding arrangements, however the view of those fishers are largely reflected through the State peak recreational fishing bodies and national fishing associations. The support of those bodies is also acknowledged.

STEERING COMMITTEE

The steering committee comprises members that have been drawn from all areas of expertise required to deliver the outcomes identified through the national strategy. The Steering Committee was established in August 2007.



Ross Winstanley of Winstanley Fisheries Management Services Pty Ltd is the chair of the steering committee. Ross is currently a fisheries consultant and comes from Geelong in Victoria. He has had extensive experience in fisheries management with 33 years service with Vic Fisheries before setting up his own consultancy in 2001. Ross is a keen recreational fisher and spends a lot of his spare time fishing for Snapper in Corio Bay.



Bill Sawynok is the Manager of Recfishing Research. Bill runs his own business Infotish Services based in Rockhampton in Queensland and manages the Suntag fish tagging program. He is a director of the Australian National Sportfishing Association and a member of the Recreational Fishing Advisory Committee. He is a past director of the Fisheries Research and Development Corporation and a past director of the CRC Reef Research Centre. Bill remains a keen recreational fisher and spends what spare time he has chasing Barramundi and other species throughout tropical Australia.



Len Olyott is a third-generation recreational angler whose passion for fish and fishing led him to pursue a career in fisheries science. Len is currently chief executive officer of Recfish Australia, the peak national body for recreational fishers. Prior to that Len worked for the Queensland Department of Primary Industries and Fisheries (DPI&F) for six years as a senior fisheries scientist in the Recreational Fishing Unit. Len's passion for fish and fishing resulted in him studying the biology of a South African squid species at South Africa's Rhodes University in 2002. Len was also involved in the development of a sport fishery information management system for trout and trout streams in South Africa. A founding member of several flyfishing clubs, a fisheries consultant to various clubs and organisations, Len brings his science background and advocacy role for recreational fishers to Recfishing Research.



Julian Pepperell has been director of his own fisheries consultancy business Pepperell Research and Consulting Pty Ltd. Julian has been based in Doonan in Queensland since 2001 and before that time was based in New South Wales. Julian has worked extensively in recreational fisheries research with special expertise in marine gamefish and fishing media.



Doug Joyner is the Executive Officer of the Australian Fishing Tackle Association and is based in Sydney in NSW. He represents the Recreational Fishing Industry on various government and non-government committees and provides comment to various media agencies throughout Australia. Focused lobbying also is provided on emerging issues affecting public access to their resources held in trust by various agencies.



Kane Moyle is Policy Officer with Recfishwest. In this role, Kane represents the best interest of Western Australian recreational fishers on issues such as fisheries management, natural resource management, marine park planning and fisheries research priorities. Kane holds a BSc majoring in Marine Biology and Zoology with Honours in Marine Biology (1st Class). Kane is a graduate of the DAFF Pathways to Rural Leadership Course and the Recfish Australia Next Generation of Leaders Course. Kane was recently awarded the FRDC Peter Dundas-Smith professional development scholarship. Kane is a keen recreational angler and diver, who enjoys an extensive range of recreational fishing pursuits.



Steve Sutton is a research fellow in the School of Earth and Environmental Studies at James Cook University. Steve is a social scientist specializing in the "human dimensions" of recreational fisheries. His research interests include: factors influencing fishing participation patterns, measuring the social values recreational fishers place on fishing and fisheries resources, and participation by recreational fishers in consultation programs concerning fisheries issues. Steve is also an active fly-fisher and spends most of his free time on the water.



Phil Sahlqvist is a scientist at the Bureau of Rural Sciences (BRS) where he has worked for the last 20 years. His first major project at BRS was the Australian Fisheries Resources book, published in 1993 and he has since concentrated on fisheries data management and analysis in Commonwealth fisheries. He is also involved in improving access to national fisheries statistics through the secretariat of the AFMF Fisheries Statistics Working Group. Phil has maintained an interest in recreational fisheries research in recent years by investigating the recreational fisheries databases owned by government agencies and evaluating community-based monitoring methods. He is a keen angler and when time permits enjoys fishing in southern NSW estuaries and highland streams.



John Diplock managed recreational fishing in NSW from 1998 to 2008 and oversaw the introduction of the all waters recreational fishing licence in 2001. He was responsible for expenditure of revenue from the Recreational Fishing Trusts and the development of the suite of Trust funded programs. He left NSW DPI in 2008 to set up Hamata Pty Ltd which provides fisheries consultancy services to government and industry.



Alistair McIlgorm is Professor at the Australia's National Centre for Ocean Resources and Security (ANCORS), University of Wollongong, NSW. He was formerly Director of the National Marine Science Centre, Southern Cross University, Coffs Harbour and was Fisheries Economist with the Australian Maritime College. As Director of Dominion Consulting Pty Ltd he has completed several surveys of recreational fishing expenditure in regional NSW and of the fishing tackle industry nationally for the Australian Fishing Tackle Association. At NMSC he oversaw development of a "sustainable recreational fishing" schools visit experience and aquarium under Commonwealth community grant and NSW Recreational Fishing Trust funding.

Crispian Ashby joined the FRDC in February 2002, starting as a Project Manager before taking over as the Program Manager in June 2005. Formerly with Victoria's Marine and Freshwater Resources Institute as a senior field scientist, he worked with industry on various FRDC projects assessing bycatch reduction measures in the South East Trawl fishery. Prior to this, he worked with New South Wales Fisheries on bycatch issues in the South East Trawl, estuarine prawn and finfish haul fisheries.



Bryan van der Walt is the A/Manager Recreational Fisheries Programs at Industry & Investment NSW and is based at the Cronulla Fisheries Research Centre of Excellence, Sydney. Bryan coordinates expenditure from the Recreational Fishing Fees in NSW and oversees a wide range of programs, including fisheries enhancement and education and advisory programs, to benefit recreational fishers. He is also involved in recreational fisheries policy development and implementation.



Cameron Westaway Dip. App. Sci. (aquaculture). Cameron has over 15 years experience in fisheries management including management of commercial aquaculture, aquaculture extension and development, advisor to WA Minister for Fisheries on Commercial and recreational fishing, Agricultural business development, inland recreational management, marine park management and commercial abalone management in NSW. Currently responsible for overall management of NSW freshwater recreational fisheries including fish production facilities at Ebor, Jindabyne and Narrandera as well as the NSW commercial abalone fishery.



Steve Williamson was originally from Sydney then moved to Jindabyne in the Snowy Mountains where he has been a professional fishing guide and charter boat operator for 21 years and a fishing tackle shop owner for 6 years. Steve also operates a saltwater fishing business on the far south coast Pambula introducing families to the sport of recreational fishing. Steve is the current president of the Professional Fishing Guides and Instructors Association of Australia. Steve's passion, is fly fishing and spends most of his time catching anything from trout and bass to flathead and bream.

1. NON-TECHNICAL SUMMARY

Recfishing Research
National Strategy for Recreational Fisheries Research, Development and Extension

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Objectives

The objectives of this project were:

- 1 Through extensive and ongoing consultation with the recreational sector, develop and maintain a list of current national-level recreational fishing RDE priorities.
- 2 Work with recreational fishing stakeholders and researchers at all levels to facilitate the development of RDE projects to meet identified priorities.
- 3 Develop an extension network that will promote the adoption of new knowledge generated by recreational fishing related R&D by decision makers, recreational fishers and the wider community.
- 4 Assess the adoption of the new knowledge by decision makers, recreational fishers and the wider community, and identify constraints and barriers to the adoption of new knowledge by these groups.

Non-technical Summary

OUTCOMES ACHIEVED

A Business Plan was developed for Recfishing Research in 2007/08 and has been updated each year. The Business Plan identifies the national priorities for RDE for the recreational fishing sector. The Business Plan is complemented by an annual Status Report that identifies what has been done to address the national priorities.

Recfishing Research has worked with Recfish Australia, fisheries stakeholders and researchers and assisted in the development of projects to address the national priorities. It has assisted in the preparation of research proposals to FRDC and sought funding from industry and other sources.

An extension network has been established comprising around 150 key people from peak recreational fishing bodies, fishing organisations, research agencies, fisheries agencies and recreational fishers. Scientific papers and technical reports are distributed through this network and through the Recfishing Research website. These groups have their own extensive networks where the information is further distributed.

Towards the end of the project an online survey was undertaken to determine awareness of and the effectiveness of Recfishing Research. It was primarily targeted at the Recfishing Research network however did sample a wider group of recreational fishers. This survey showed a high level of awareness among respondents, useful feedback on Recfishing Research services and some guidance on where the future focus needs to be.

ADDRESSING NATIONAL RESEARCH PRIORITIES

Recfishing Research used national and international forums to help identify the national priorities for RDE and to assist with the development of its Business Plan. A workshop in Hobart in 2005 identified the initial national priorities. Since then Recfishing Research has used relevant conferences, workshops and forums to review, refine and update the national priorities. This included the 5th World Recreational Fishing Conference held in Florida in November 2008 and a US study tour held in conjunction with the conference. A number of workshops that addressed specific issues such as Marine Protected Areas and Fish Stock Enhancement also helped to refine the national priorities.

As well the Business Plan has also taken into account the priorities of key bodies with an interest in recreational fishing including Recfish Australia, Fisheries Research and Development Corporation, Australian Fishing Trade Association and the Department of Agriculture, Fisheries and Forestry.

In 2008 Tony Burke, Minister for Agriculture, Fisheries and Forestry established the Recreational Fishing Advisory Committee to review the 1994 National Recreational Fishing Policy and establish the Recreational Fishing Industry Development Strategy. Recfishing Research has also taken into account the RDE issues from that review.

In the 2009/10 Business Plan the national RDE priorities have been defined in broad terms as:

- Social, health and economic benefits of recreational fishing;
- Building capacity in the recreational fishing sector;

- ❑ Recreational fishing statistics especially in relation to attitudes, motivation, demographics, participation, fishing methods, catch and effort;
- ❑ Best practices in recreational fishing to ensure that fishing is sustainable, ethical and humane;
- ❑ Impacts of management measures such as access limitation and regulation;
- ❑ Impacts of fishery enhancement;
- ❑ Impacts of environmental and climate change on recreational fishing and fisheries.

Underpinning these RDE priorities is the need to improve the communication and uptake of research and development results among recreational fishers and others. This requires the development of relationships with the myriad of recreational fisher networks at the national, state, regional and local level to allow the information to be passed to these networks. Recfishing Research, Recfish Australia and other fishing bodies all play a role in developing those relationships and the extension of research results.

As well as identifying the national priorities Recfishing Research has also identified the key areas for investment within those priorities.

To complement the Business Plan Recfishing Research has produced an annual report outlining what has been done to address the national priorities. In 2008/09 this was produced as the Recfishing Research Status Report 2008/09. The Status Report for 2009/10 has been further refined to improve the reporting on progress towards addressing the national priorities.

The Status Reports identify scientific papers and technical reports published in the previous year, research work that is currently underway that Recfishing Research is monitoring and what work has commenced or is being planned. This provides a comprehensive view of the status of addressing the national priorities.

The Business Plan and Status Reports are distributed through the Recfishing Research Network to promote the development of projects to address the national priorities.

Recfishing Research identified the highest priority areas for investment within the national priorities and has worked actively with stakeholder groups and researchers to develop projects that address those priorities. It has identified those researchers and stakeholders that have the capacity and skills and encouraged and worked with them to develop projects to address the priorities.

In the 2009/10 Business Plan the highest priorities for investment were:

- ❑ The health and well-being benefits of recreational fishing;
- ❑ Measuring the economic value of recreational fishing and fish stocking, especially to regional and rural communities;
- ❑ Documenting the outcomes for recreational fishers from management change (eg MPAs, fishing regulations and fisheries management plans) and understanding the factors that lead to good and bad outcomes for the recreational fishing sector.

Recfishing Research has been assisting with the development of a number of projects in relation to these priorities. At this stage it is likely a number of projects will emerge in 2010/11.

Along with commercial and recreational fishing and aquaculture stakeholders, during 2009/10 Recfishing Research has been working actively in the development of a National Fisheries and Aquaculture RD&E Strategy.

DEVELOPING AN EXTENSION SERVICE

While Recfishing Research plays a strategic and catalytic role in relation to addressing national RDE priorities it has recognised that extension is still the weakest link in the chain. Therefore it takes a much more hands-on role in relation to extension.

Recfishing Research has taken a multi-pronged approach to assisting with extension. This has been through:

- ❑ Establishing a Recfishing Research Network comprising key people in peak recreational fishing bodies, fishing organisations, fishing media, research agencies, fisheries agencies and recreational fishers;
- ❑ Using those networks to further distribute information of interest to those in their networks;
- ❑ Providing information on current research and associated activities that are of interest to the network;
- ❑ Distribution of scientific papers and technical reports through the network;
- ❑ Development of a rapid response information service to provide factual information on emerging issues, especially those receiving media or internet attention;
- ❑ Development of the Recfishing Research website that provides further access to technical reports and fact sheets;
- ❑ Providing funding to projects to increase the funding available for the distribution of the results of research;
- ❑ Assisting in the development of information products from research that are suitable for their target audience.

The Recfishing Research Network now comprises around 150 people from the various stakeholder groups. This network is constantly growing as there are new subscribers each time reports are sent out. Many of these have their own networks through which information is further distributed. It is not possible to estimate the total extent of all these networks but there likely to be many hundreds of people that the information can reach.

"Publications of Interest to Recfishing Research" has been particularly successful. This service distributes recently published scientific papers (with the authors' approval) and technical reports to the network. To date there have been 43 mailouts of around 90 papers and reports. Where we have the approval of the authors and publishers we also make reports available for download from the website.

A rapid response information service to provide factual information on emerging issues is still evolving. Many issues that are picked up by the media or are the subject of significant debate often have very little factual basis to the arguments. The aim of Recfishing Research is to provide factual information that can be used to improve the substance of information distributed. This is a real challenge given the rapid distribution of information through the Internet. Recfishing Research has been able to correct some erroneous information circulating via the Internet eg. a photograph purporting to show a Barramundi of several hundred kilograms was in fact a Nile Perch caught in Africa. Recfishing Research was able to correct this information, at least in some of the networks.

The Recfishing Research website was upgraded during this project to improve the level of service provided. As well as distribution of reports through the network there have been a significant number of downloads of some reports from the website indicating that there is wide use from outside the network.

Recfishing Research has provided funding to a number of projects to assist with the extension of information. Some of the information products that Recfishing Research has helped fund or assisted with distribution include:

- ❑ Reprints of information pamphlets on best practices in releasing fish developed through the Released Fish Survival program;
- ❑ Additional copies of a Catch and Release pamphlet published by NSW DPI;
- ❑ Additional copies of 2 Barramundi pamphlets produced by NT Fisheries resulting from a Barramundi survival project;
- ❑ Additional copies of the National Code of Practice for Recreational and Sport Fishing produced by Recfish Australia;
- ❑ Additional copies of an information brochure and DVD on the Release Weight produced by Recfishwest;
- ❑ Pamphlet and CD on reports on Tagging of Stocked Fish in Impoundments and Waterways of Queensland in conjunction with Fisheries Queensland;
- ❑ DVD of FRDC segments from the "Escape with ET" television show.

ASSESSING AWARENESS OF AND THE EFFECTIVENESS OF RECFISHING RESEARCH

Towards the end of the project in the first half of 2010 Recfishing Research undertook a survey to examine the effectiveness of Recfishing Research. The survey was based on an online questionnaire on the Recfishing Research website and was undertaken by Pepperell Research and Consulting Pty Ltd. The target groups for the survey included recreational fisheries managers, researchers involved in recreational fishing research, FRAB members, peak recreational fishing body representatives, recreational fishing journalists and recreational fishers.

There were a total of 144 respondents which was considered an excellent response rate given the small size of the main target groups (excluding recreational fishers). A separate report providing an analysis of the results of the survey was completed. The key findings of the survey were:

- ❑ Overall awareness of Recfishing Research was very high in all respondents with 91.7% indicating at least some awareness of Recfishing Research before the survey;
- ❑ Researchers as a subgroup has extremely high awareness of Recfishing Research, all respondents having some awareness of Recfishing Research before the survey;
- ❑ Even among recreational fishers that were not part of the target group, there was high awareness of Recfishing Research (80% had some awareness);
- ❑ Of respondents who considered they had some involvement with Recfishing Research 63.1% had received reports, papers or information via email while 45.8% had viewed the website;
- ❑ Information delivered via email and the Recfishing Research website were rated especially useful by a significant majority of the survey target group;
- ❑ Those researchers who submitted proposals or preproposals to Recfishing Research for comment, found this process to be very useful;
- ❑ "Commissioning research to meet specific needs", "Disseminating the results of research" and "Maintaining a list of national recreational fisheries research priorities" were considered the most important in promoting and developing recreational fisheries research;
- ❑ "Wider/better dissemination of research information" was considered the most important area where Recfishing Research could improve its functions;
- ❑ Regarding future research in recreational fisheries, "Impacts/benefits of fisheries enhancement", "Impacts of recreational fishing on fish stocks" and "Impacts/benefits of Marine Protected Areas" rated most highly among respondents;
- ❑ Other areas seen as important for future research were "Impacts of commercial fishing/effects of closures" and "Social aspects of recreational fishing";

- ❑ "Wider/better dissemination of research information" was considered the most important area where Recfishing Research could improve its functions and role;
- ❑ The main fish species deemed to be in need of future research were pelagic 'gamefish' and tropical reef species;
- ❑ Fishing magazines and the Recfishing Research website were the preferred method of delivery of information on recreational fishing research.

Keywords

Recfishing Research
Recfish Australia
National strategy
Research, development and extension
Recreational fishing research priorities

2. BACKGROUND

In 2005, the FRDC Board recognised the need to provide a more coordinated and targeted national approach to recreational fisheries research, development and extension (RDE). In response to this, Recfish Australia undertook a project titled "Establishing a recreational fishing working group to develop a national implementation plan for RDE". In August 2005, a joint FRDC and Recfish workshop held in Hobart identified national recreational fisheries RDE priorities, many of which were not being addressed from a national perspective. The workshop agreed on the need for a new approach to provide for coordinated and targeted R&D with a focus on achieving priority outcomes for the recreational sector.

Particular emphasis was placed on the need to improve extension to recreational fishers and E was added as an integral part of the national strategy. The workshop agreed it would be appropriate to expand the Released Fish Survival Steering Committee (now Recfishing Research) to progress this issue, while consulting with the recreational sector to determine the appropriate body to undertake this role in the longer term.

Following the workshop Recfishing Research was tasked with holding a workshop to determine national RDE priorities for stock enhancement, fish stocking and stock recovery. This was in response to the number of similar but uncoordinated proposals received by the FRDC each year relating to this issue. The workshop was developed as FRDC project 2005/323 and was held in February 2006 in Brisbane. This project has been successfully completed and a final report and workshop proceedings are available. The workshop identified a number of priorities and two projects were developed for the 2007/08 FRDC round to address the priority issues.

The Hobart workshop timing provided little opportunity to engage researchers who were proposing to submit applications in October 2005 for the FRDC 2006/07 round. Two exceptions led to projects that were subsequently approved by FRDC. These were 2006/057 "Development of a national environmental management and accreditation system for business/public recreational fishing competitions" and 2006/053 "Sustainability of recreational fisheries for Murray Cod in the Murray Darling Basin". Recfishing Research's input to the latter project increased the emphasis on the survival of released Murray Cod, consistent with the Released Fish Survival National Strategy.

Following the Hobart workshop a paper was developed titled "Implementing a National Strategy for Recreational Fisheries RDE". The paper sought feedback on a proposed model to action the priorities identified through the workshop in Hobart in the long-term (a role temporarily filled through the expanded Released Fish Survival Steering Committee). This paper was circulated in February 2006 to State recreational fishing peak bodies, national recreational fishing organisations, AFMF and fisheries agencies to obtain feedback on the proposal. The State peak bodies were supportive and fisheries agencies provided some useful feedback and requested more information, primarily in relation to the formation and functioning of the Steering Committee. The paper was revised as the proposal evolved based on feedback received from the recreational sector and other stakeholder groups, and was circulated with the full application.

Responses to the paper indicated that there was sufficient support, particularly from the recreational fishing industry, for a pre-proposal to be developed for the 2007/08 FRDC round to provide for the development and implementation of the national strategy. That pre-proposal was submitted to FRDC in May 2006 and was circulated to State recreational fishing peak bodies, national recreational fishing organisations, AFMF and fisheries agencies. Again there was support from the State peak bodies and national fishing organisations. FRABs that responded were VicFRAB, TasFRAB, WA FRAB, QFIRAC, NT FRAB and ComFRAB. Most FRABs sought more information relating

to the proposal, and a number expressed their general support for the concept. QFIRAC was the only FRAB that did not support the development of a full application.

It was considered that there had been wide consultation with the recreational fishing industry and fisheries agencies and that there was sufficient support, especially from the recreational fishing industry, to develop a full application. This full application was being widely circulated and formal letters of support were sought from as many supporting groups as possible. Those letters of support were submitted with the final application.

3. NEED

The need for a more cohesive national approach to recreational fisheries RDE has been recognised by Recfish Australia and FRDC for some years. The first move towards a more cohesive approach occurred in 2001/02 with the establishment of the National Strategy for the Survival of Released Line Caught Fish. For the first time a national approach was developed to a priority issue for the recreational fishing industry and over the following years a new very inclusive approach was taken. Key priorities have been addressed through the strategy, leading to a significant improvement in our knowledge on the survival of released fish and an improvement in the best practices for releasing fish.

In 2005 the FRDC Board recognised the need for a new approach to the broader range of recreational fishing RDE priorities and identified the need for the recreational sector to form a body to take these issues forward. The recreational fishing industry had an unmet requirement for information on the social and economic benefits provided by recreational fishing to inform resource sharing and access, counter falling participation rates and facilitate growth of the sector in line with changing community values. Research and promotion of best fishing practices was needed to meet community concerns regarding sustainability and ethical conduct of recreational fishing. Improved extension of new knowledge was needed to be improved as past R&D projects had not adequately used recreational fishers' communications networks to transfer new knowledge.

Recfishing Research was established to provide the ongoing planning and coordination needed at a national level in a way that adds value to RDE work undertaken by the States and others.

4. OBJECTIVES

The objectives of this project were:

- 1 Through extensive and ongoing consultation with the recreational sector, develop and maintain a list of current national-level recreational fishing RDE priorities.
- 2 Work with recreational fishing stakeholders and researchers at all levels to facilitate the development of RDE projects to meet identified priorities.
- 3 Develop an extension network that will promote the adoption of new knowledge generated by recreational fishing related R&D by decision makers, recreational fishers and the wider community.
- 4 Assess the adoption of the new knowledge by decision makers, recreational fishers and the wider community, and identify constraints and barriers to the adoption of new knowledge by these groups.

5. METHODS

5.1. Developing and maintaining national RDE priorities

A number of national workshops and the 2008 Recfish Australia conference were used to obtain input to the development of the national priorities. The initial workshops identified the national priorities while subsequent workshops focused on identifying the key areas for investment.

In 2008 a contingent of recreational fishers attended the 5th World Recreational Fishing Conference in Florida. This was followed by a study tour in the eastern USA to examine how a number of issues were being dealt with there.

The RDE plans of a number of organisations and fishing groups were also considered in the development of the national priorities. Recfishing Research continues to monitor RDE plans as they are revised and updated and adjusts the national priorities accordingly.

Members of the Steering Committee attend as many forums related to recreational fishing issues as possible to keep abreast of current developments and the associated RDE needs. That also enables the continual update of the national priorities and the key areas for investment.

In order to keep the national priorities current an annual report was produced that addressed the following:

1. The desired outcome that was sought in relation to the issue;
2. Where should investment be focused;
3. Why the issue is important;
4. What is happening in relation to the issue;
5. New relevant reports and publications;
6. Work in progress that is being monitored;
7. Recently approved projects or projects currently being developed.

Following the formalisation of the Recfishing Research Steering Committee it was responsible for the development and maintenance of a business plan based on addressing the national priorities and the production of an annual report.

5.2. Developing projects to address the priorities

Based on the national priorities the key areas for investment were identified in relation to each of the priorities. This provided Recfishing Research with specific issues to focus on for the development of projects. Within those key areas for investment the three highest priority areas were identified by the Steering Committee.

This provided a clear focus for where projects needed to be developed. Links were developed and established with research agencies, key recreational fishing groups, Commonwealth and State fisheries agencies, Recreational Fishing Licence Trusts and potential funding agencies.

These linkages were then used to identify researchers or groups that were interested in developing projects that addressed the national priorities. While the primary focus was on projects that addressed the key areas for investment, assistance was provided to other projects that addressed the national priorities. In some instances that extended to regional projects that were considered to be strategically significant.

The approach taken in relation to each of the priority areas was to:

- Identify the key questions that need to be answered;
- Determine the best way in which they can be addressed;
- Engage the people/groups who are capable of addressing the questions;
- Work collaboratively to develop projects that will address these questions;
- Determine the most appropriate funding sources;
- Work with FRDC and Recfish Australia to commission research in the highest priority areas.

In order to further encourage development of projects in these priority areas the Steering Committee has taken steps to build closer links with the FRABs. These steps include participating with the FRAB chairs in FRDC's annual planning workshops. In future, local FRAB chairs will be invited to attend Recfishing Research meetings.

5.3. Developing an extension network

The first two objectives focused on developing projects that address key issues for the sector. This objective focused on getting information to recreational fishers based on research. However with an estimated 3.5 million recreational fishers in Australia it was considered that effort needed to be focused in specific areas.

An extension network was developed as the most appropriate way of distributing the results of R&D projects. The network includes:

- Key recreational fishing bodies that have their own extensive networks;
- Researchers working on recreational or associated environmental issues;
- Fisheries managers that use the research information;
- People working in the fishing media;
- Individual recreational fishers that wanted direct access to the information;

There are two forms of communication with the network. One is Recfishing Research News which is used to pass on newsworthy information of interest to the network. The other is the distribution of technical reports and scientific publications considered of interest to the network. It was recognised that even within the researcher community there was difficulty in keeping up with the latest scientific publications and technical reports.

These networks are encouraged to further distribute the information through their own networks and to develop products based on information that is tailored to the needs of their network members.

The Recfishing Research website was revamped to improve the delivery of relevant reports and publications. Downloads of reports are continually monitored to obtain feedback on what people are seeking.

The network mailing list and website, along with other mailing lists and website managed by Infofish Services, are maintained and updated through a single Control Panel that is maintained by One Pixel. All material for distribution or updating of website pages and documents are undertaken from the control panel. The control panel also tracks all requests for technical support and changes to the system. This provides a quick and efficient method for managing information distribution that requires no technical input except for system maintenance.

5.4. Assessing the effectiveness of Recfishing Research

In the last six months of the project a survey was undertaken to assess the effectiveness of Recfishing Research. The survey was undertaken by Pepperell Research and Consulting Pty Ltd.

The initial concept of a survey of end users was refined to a survey of those within the Recfishing Research network and a wider group of those who were not in the network but were potential users of the network services.

A questionnaire was developed and the survey was conducted online through the Recfishing Research website.

A separate report on the results of the survey was produced.

6. RESULTS

6.1. Developing and maintaining national RDE priorities

The following forums were used to develop the initial national priorities and key areas for investment.

1. A workshop in Hobart in 2005 identified the initial national priorities.¹
2. A workshop on understanding the ESD effects of marine and freshwater stock enhancement and stock recovery in Brisbane in 2006.²
3. A workshop on improving the performance of fishing competitions in Brisbane in 2006.³
4. A workshop on Marine Protected Areas was held in Brisbane in 2006.⁴

The following forums were used to refine the national priorities and the key areas for investment.

1. Recfish Australia conference and Recfishing Research workshop in Canberra in October 2008.⁵
2. 5th World Recreational Fishing Conference in Florida and the USA study tour in November 2008.⁶

The research priorities of the following organisations were also considered in the development of the national priorities.

1. Recfish Australia
2. Fisheries Research and Development Corporation
3. Australian Fishing Trade Association
4. Recreational Fishing Advisory Committee
5. Department of Agriculture, Fisheries and Forestry
6. Australian Fisheries Management Forum

This resulted in the development of an annual business plan that outlined the national priorities and the key areas for investment. The following plans were produced and a copy of the current plan is included with this report and shown in *figure 1*.

¹ Winstanley 2006 "Implementing a National Strategy for Recreational Fishing R,D&E" and Sawynok 2006 "Business Plan for Recfishing Research"

² FRDC project 2005/323: "National Workshop on Research and Development Priorities of Stock Enhancement, Fish Stocking and Stock Recovery"

³ FRC project 2006/057: "Development of a national environmental management and accreditation system for business/public recreational fishing competitions"

⁴ Recfishing Research report: "Marine Protected Areas - Stocking the tool box for recreational fishers"

⁵ FRDC project 2008/336: "2nd Biennial National Recreational Fishing Conference, 2008 Recreational Fishing Awards and 2nd Recfishing Research National Workshop"

⁶ "Report on trip to USA Bill Sawynok November 2008"

1. An Investment Plan for 2007/08
2. Business, Investment and Extension Plan Edition 2 2008/10
3. Business Plan Edition 3 2009/10
4. Business Plan Edition 4 2010/11

The business plan was supported by an annual report. The following reports were produced and a copy of the current report is included and shown in *figure 1*.

1. Annual report 2007/08
2. Business, Investment and Extension Plan Edition 2 2008/10
3. Recfishing Research Status Report 2008/09
4. Recfishing Research Status Report 2009/10

In 2008/09 the annual report was included as part of the business plan however this was felt to detract from the business plan and separate reports were produced since then.

The Status Report for 2009/10 has developed into a comprehensive document that provides an annual snapshot on the status of RDE in relation to the key issues identified for the recreational fishing industry.



Figure 1: Recfishing Research Business Plan and Status Report

6.2. Developing projects to address the priorities

6.2.1 Developing projects in the key areas for investment

The 2007/08 Investment Plan only identified the national priorities and did not identify the key areas for investment so that during that year there was only a general promotion of those priorities without focus on any particular issues.

Again in 2008/09 there was no identification of key areas for investment and, as in the previous year, there was general promotion on the national priorities to both key fishing organisations and researchers. However in that year information was obtained on projects that were recently completed or underway. This provided the understanding of what was happening and where the important gaps were.

The Business Plan edition 3 2009/10 was the first attempt at providing a more focused plan, starting with the identification of the major issues facing recreational fishing nationally. In that year the key areas for investment were identified for the first time. This involved identifying the key areas under each national priority. To further focus attention the highest priority areas for investment were identified as targets for 2009/10. These were:

As part of the current Business Plan Recfishing Research will aim to get 2 projects funded through the 2010 FRDC round that address the following high priorities.

- ❑ *The health and well-being benefits of recreational fishing;*
- ❑ *Measuring the economic value of recreation fishing and fish stocking, especially to regional and rural communities;*
- ❑ *Documenting the outcomes for recreational fishers from management change (eg MPAs and fisheries management plans), and understanding the factors that lead to good and bad outcomes for the recreational fishing sector.*

This provided a clear focus for the development of projects and steady progress was made in the development of projects to address these issues.

The Bureau of Rural Sciences expressed interest in developing a project to obtain data on the health and well-being benefits of recreational fishing. An outline of a proposal was developed by BRS however as this issue was not recognised as a priority for that agency the further development of a project was unable to gain internal support and the proposal lapsed.

During 2008 the Hon Tony Burke MP Minister for Agriculture, Fisheries and Forestry appointed a Recreational Fishing Advisory Committee as part of the Commonwealth Government's commitment to a Recreational Fishing Industry Development Strategy. This committee has produced a Discussion Paper⁷ as part of that development strategy. The paper also identifies the acknowledgement of the health and well-being benefits of recreational fishing as a goal.

This has increased the priority of the issue. Recfishing Research is currently working with the FRDC Social Science Research Coordination Program Manager on the development of a project that will initially undertake a study into what research is currently available in relation to that issue. The objective now is to develop a project that is funded in 2010.

Recfishing Research has supported the development of a project by Fisheries Queensland to examine the economic importance of fish stocking to rural and regional communities. This project will be undertaken by the Central Queensland University Australia. Fisheries Queensland will be providing the funding for this project. As this example shows, Recfishing Research is not limited to working with FRDC-funded projects.

In documenting the outcomes for recreational fishers from management change there have been two projects that have addressed this issue, at least in part. These projects

⁷ Recreational Fishing in Australia 2010 and Beyond, Recreational Fishing Advisory Committee Discussion Paper (March 2010)

look at the positive contribution that recreational fishers are making to the sustainability of fisheries and their environment.

During 2008/09 the Bureau of Rural Sciences has undertaken a review of community involvement in recreational fishing data collection - opportunities and challenges. The report from this project is expected to be released in mid 2010.

A project by Greenfish Consulting to review the contribution of the recreational fishing sector to conservation and sustainability initiatives has recently been approved by the FRDC for funding under the Tactical Research Fund.⁸

The Business Plan edition 4 2010/11 has recently been completed. It has maintained two of the high priorities from the previous plan as these have yet to be adequately addressed.

As part of the current Business Plan Recfishing Research will aim to get 2 projects funded through the 2010 FRDC round that address the following high priorities.

- The health and well-being benefits of recreational fishing;*
- Measuring the economic value of recreation fishing and fish stocking, especially to regional and rural communities;*
- Implementing the priority projects identified by the Recreational Fishing Advisory Committee*

Implementing the priority projects identified by the RFAC has been added as a high priority. As part of the Recreational Fishing Industry Development Strategy it is expected that a number of projects under that strategy will be funded from the \$2m made available to the strategy. DAFF are currently negotiating with FRDC to deliver the projects identified by the RFAC. It is expected that Recfishing Research will play a role in those projects which have a significant RDE component. This work will be undertaken in the next phase of Recfishing Research. It is also expected that a number of these projects will address the national priorities.

6.2.2 Developing nationally or regionally significant projects

As well as working on the development of projects in the key areas for investment Recfishing Research has assisted in the development of projects that address the national priorities and other projects that are considered to be nationally or regionally significant.

A good example was the development of a project on Longtail Tuna. Following the declaration of Longtail Tuna as a recreational-only species it was considered nationally important to obtain some basic information on the species, even though it is a very small specialised fishery. From 2006 to 2008 a project was developed with Shane Griffiths of CSIRO to address knowledge gaps on Longtail Tuna.⁹ Because of the recreational-only status of the species Recfishing Research was able to secure funding of \$13.5k from six recreational fishing organisations. This was probably the first time where a significant cash contribution had been made to a research project directly by recreational fishers.

At the time of the establishment of Recfishing Research FRDC had funded a project to develop the concept of accreditation for fishing competitions with the Recfishing Research manager being the Principal Investigator.¹⁰ One of the early national

⁸ Project 2009/333 Tactical Research Fund: Review and extension of conservation and sustainability-focused initiatives which have been funded, supported or undertaken by Australia's recreational fishing sector

⁹ Project 2008/058 Biology, fisheries and status of Longtail Tuna, with special reference to recreational fisheries in Australian waters

¹⁰ Project 2005/235 A national environmental management and accreditation system for recreational fishing tournaments: concept development

priorities for Recfishing Research was to improve the performance of fishing competitions. Recfishing Research provided strong support for the development of the NEATFish environmental standard for recreational fishing competitions with the Recfishing Research manager continuing as Principal Investigator.¹¹ However once the concept had been tested and the NEATFish system developed the implementation was handed over to Recfish Australia and Digsfish Services.¹²

This is good example where Recfishing Research played an important role in supporting the early research and development. However other groups were considered better placed for implementation so that phase of the project was passed on. It has been important for Recfishing Research to remain within the bounds of its objectives so that we continue to focus on dealing with research and development to underpin the national priorities.

An example of where Recfishing Research considered a regional issue to be of national significance was in relation to the proposal to stock Hazelwood Power Station pondage in Victoria with Barramundi. This would create a precedent of stocking a tropical species in an artificial hot water environment and required a rigorous risk assessment to be undertaken. Recfishing Research strongly supported a risk assessment project which was subsequently funded by FRDC.¹³

Another project where Recfishing Research has provided assistance in development was in relation to examining the long term genetic and ecological impacts of fish stocking programs. Fisheries Queensland made several attempts at getting a project to address this issue without success. Recfishing Research provided assistance in refining the project which was funded in 2009.¹⁴ The Recfishing Research manager is also on the Steering Committee for this project.

Recfishing Research has also helped other projects in smaller ways through providing advice on the development of applications, suggesting linkages with others working on similar projects and suggesting funding options for projects.

6.2.3 Providing advice to the FRDC on Recreational Fishing Projects

Another role for the Recfishing Research Steering Committee is to provide advice to FRDC on applications that provide a flow of benefits of 20% or more to the recreational sector. Each year a number of applications from the FRDC open call round are referred to the Recfishing Research Steering Committee for advice. This advice is then considered by the FRDC Board, along with advice from FRABs and other experts, when making a decision on a project.

At this stage the Steering Committee has been moderately successful in getting its high priority projects approved.

In the 2010 round Recfishing Research reviewed seven projects and provided strong support to three. Only one of those projects was successful however another was offered the opportunity to resubmit while the other dealing with Murray Cod was rejected awaiting the outcomes of a Murray Cod workshop.

One application that was submitted to the Tactical Research Fund was supported and was approved.

¹¹ Project 2006/057 Development of a national environmental management and accreditation system for business/public recreational fishing competitions

¹² Project 2008/215 Implementation of the NEATFish environmental standard for recreational fishing tournaments

¹³ Project 2009/014 Tactical Research Fund: Conduct a risk assessment for stocking Barramundi into Hazelwood Pondage in Churchill Victoria

¹⁴ Project 2009/040 Fish stocking programs: are there long term genetic and ecological impacts?

6.3. Developing an Extension Service

While Recfishing Research plays a strategic and catalytic role in relation to addressing national RDE priorities it has recognised that extension is still the weakest link in the chain. Therefore it takes a much more hands on role in relation to extension.

Recfishing Research has taken a multi-pronged approach to assisting with extension. This has been through:

- ❑ Establishing a Recfishing Research Network comprising key people in peak recreational fishing bodies, fishing organisations, fishing media, research agencies, fisheries agencies and recreational fishers;
- ❑ Using those networks to further distribute information of interest to those in their networks;
- ❑ Providing information on current research and associated activities that are of interest to the network;
- ❑ Distribution of scientific papers and technical reports through the network;
- ❑ Development of a rapid response information service to provide factual information on emerging issues, especially those receiving media or internet attention;
- ❑ Development of the Recfishing Research website that provides further access to technical reports and fact sheets;
- ❑ Providing funding to projects to increase the funding available for the distribution of the results of research;
- ❑ Assisting in the development of information products from research that are suitable for their target audience.

6.3.1 Developing the Extension Network

The Recfishing Research network is an email group of people with an interest in keeping up to date with what is happening in recreational fishing research. There are currently 152 members in the network and this continues to grow with new subscribers joining on a regular basis, particularly after a mail out of new publications.

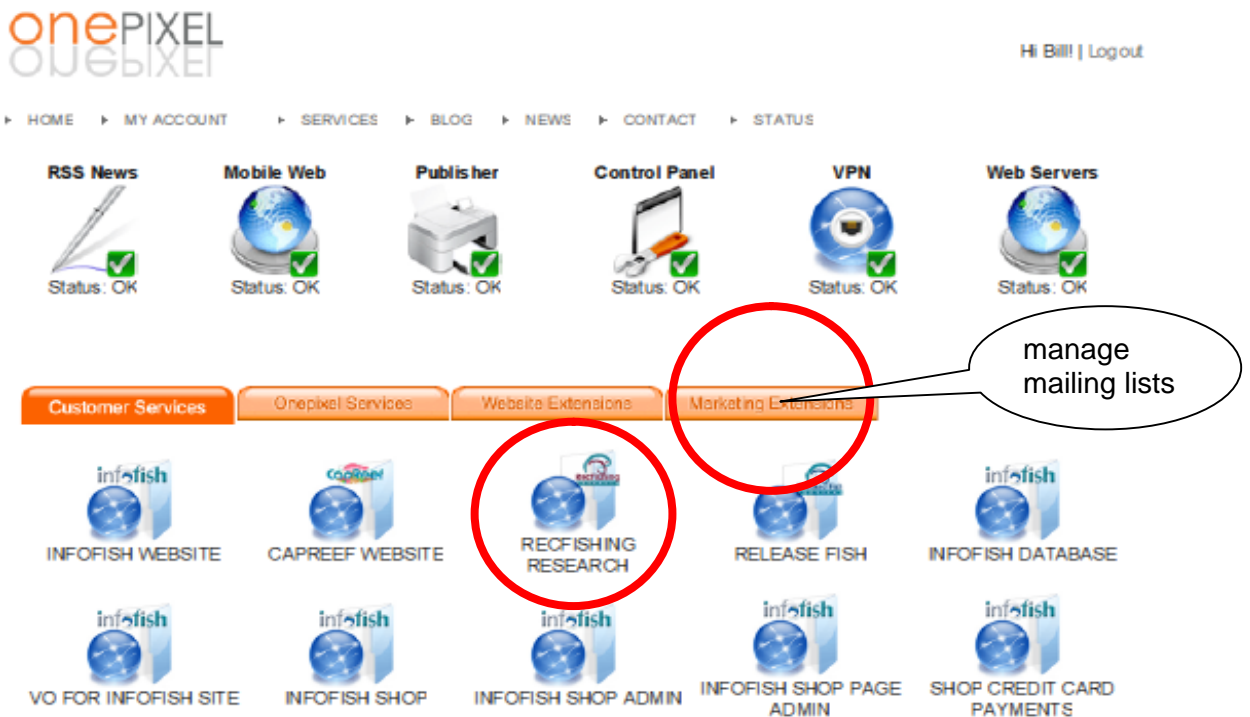


Figure 2: One Pixel Control Panel that is used to manage website and mailing lists

From March 2008 to April 2010 there were 35 Recfishing Research News bulletins sent out. Over that same period there were 43 mailouts of Publications of Interest to Recfishing Research providing 86 technical reports and scientific papers to the network. *Figure 3* shows a typical mailout of publications of interest.

Bill Sawynok

From: Bill Sawynok on behalf of bill@info-fish.net
Sent: Wednesday, 10 March 2010 9:54 PM
To: Bill Sawynok
Subject: Publications of interest to Recfishing Research 42
Attachments: Brown et al 2010 PRS Red emperor JEMBE.pdf; 91 Butcher et al ICESJMarSci 09.pdf

Recfishing Research is a national initiative of Recfish Australia and the Fisheries Research and Development Corporation. A key role of Recfishing Research is to provide access to scientific papers, technical reports and other publications relevant to recreational fisheries and recreational fishers.

We aim to get that information widely distributed as quickly as possible after publication. We would like to ensure that key groups and individuals are aware of this information so please pass onto anyone that you think would benefit from this. Also please let us know of any other material that should be distributed through Recfishing Research.

Anyone that would like to subscribe to this service can send an email to bill@info-fish.net with "Subscribe to Recfishing Research". Bill Sawynok Recfishing Research Phone: 07 4928 6133 Mob: 04 1707 5277

frdc@frdc.com.au or go to www.frdc.com.au and subscribe online." data-bbox="311 433 704 481"/>

Scale loss and mortality in angled-and-released Eastern Sea Garfish (*Hyporhamphus australis*) - Paul A Butcher, Matt K Broadhurst, Karina C Hall, Brian A Cullis and Robert G Nicoll

An improved technique for estimating short-term survival of released line-caught fish, and an application comparing barotrauma-relief methods in Red Emperor (*Lutjanus sebae* Cuvier 1816) - I Brown, W Sumpton, M McLennan, D Mayer, M Campbell, J Kirkwood, A Butcher, I Halliday, A Mapleston, D Welch, GA Begg and B Sawynok

To unsubscribe [Click Here](#)

No virus found in this incoming message.
Checked by AVG - www.avg.com
Version: 9.0.733 / Virus Database: 271.1.1/2733 - Release Date: 03/10/10 05:33:00

Figure 3: Typical mailout of publications of interest

6.3.2 Recfishing Research website

The Recfishing Research website was revamped and upgraded in September 2008 by One Pixel. *Figure 4* shows the homepage of the website. The website provides access to reports that are relevant to the national RDE priorities that have been identified. *Figure 5* shows a typical web page on one of the national priorities showing the reports that are available and the number of downloads of each report.



- Research Subjects
- Research Reports
- Released Fish Survival
- Video
- About Recfishing Research
- About the Site

Welcome to Recfishing Research!



What is Recfishing Research?

Recfishing Research is a national group that was established by the Fisheries Research and Development Corporation and Recfish Australia to improve investment and the return on investment in research, development and extension at a national scale. Go to [About Recfishing Research](#) for more information.

Recfishing Research Business Plan

The Recfishing Research Business Plan has been updated to Edition 3 2009-10. The plan sets out the national priorities for research, development and extension and the high priorities for 2009-10. If you are working on research in the recreational fishing area or are a recreational fisher interested in what is happening you need to be aware of the national priorities. [Download](#) a copy of the plan.

Coming events of interest to Recfising Research

- [Social Science Research Coordination Program](#)
The next meeting of the FRDC Social Science Coordination Program will be held in Canberra on 18 February 2010. Recfishing Research will provide a presentation to that meeting.
- [Recfishing Research Meeting 11](#)
Meeting 11 of the Recfishing Research Steering Committee will be held in Canberra on 17-18 March 2010

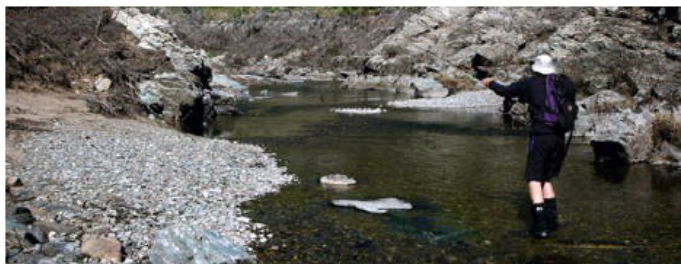
Latest news

→ [National Code of Practice now available](#)

A National Code of Practice for Recreational and Sportfishing is now available. The original code was released in 1995 and had now been updated to the 2008 version. Anyone wanting to obtain copies of the code for distribution through your own networks can [download](#) the code and distribute. Printed copies are also available for distribution. If you would like printed copies then send a request by email to shirley@info-fishnet



Figure 4: Homepage of Recfishing Research website



- Research Subjects
- Research Reports
- Released Fish Survival
- Video
- About Recfishing Research
- About the Site

Research Reports

REPORTS/FACT SHEETS : IMPACTS OF MANAGEMENT MEASURES



[Marine Protected Areas Stocking the tool box for recreational fishers](#)
Outcomes of a national workshop held in Brisbane in November 2006
Author : Bill Savynok
Date Last Updated : Tue, 27 Jan 2010
Size : 0.62 MB
Downloads : 186
[Click to View](#)

Research Reports Available

- [BEST PRACTICES IN RECREATIONAL FISHING](#)
- [BUILDING CAPACITY IN THE RECREATIONAL FISHING SECTOR](#)
- [ENHANCING RECREATIONAL FISHERIES](#)
- [IMPACTS OF ENVIRONMENTAL AND CLIMATE CHANGE](#)
- [IMPACTS OF MANAGEMENT MEASURES](#)
- [IMPROVE EXTENSION TO RECREATIONAL FISHERS](#)
- [MAINTAINING RECREATIONAL FISHING STATISTICS](#)
- [SOCIAL HEALTH AND ECONOMIC BENEFITS OF RECREATIONAL FISHING](#)

Fact Sheets Available

- [Codes of Practice](#)

Figure 5: Research Reports page on the Recfishing Research website

Fact sheets that were previously available from the Released Fish Survival website were revamped and included on the website. Video clips from the Gently Does It DVD were loaded to You Tube and made available through the website. Once all the fact sheets and other relevant material were transferred and a suitable overlap time was allowed for the Released Fish Survival website was shut down. This occurred in April 2009.

Downloads of reports and fact sheets can be readily monitored through the relevant webpage as download statistics are maintained with each document. Reports are also available of total downloads from the website on a monthly basis.

The top ten downloads of fact sheets from the website:

	Fact Sheet	Downloads
1	Fish in Live Wells	374
2	National Code of Practice	246
3	Causes of Fish Mortality	171
4	NSW Catch and Release poster	138
5	Releasing Rockcod	137
6	Dealing with Barotrauma	118
7	Releasing Tailor	101
8	Releasing Abalone	96
9	Bream and Snapper Survival poster	94
10	Handling and Releasing Fish	91

The top ten downloads of reports from the website:

	Report	Downloads
1	Marine Protected Areas Workshop report	178
2	FRDC 2005/235 report: A national environmental management and accreditation system for fishing tournaments: concept development	140
3	FRDC 2004/004 report: Assessment of the Implications of target fishing for Black Jewfish	137
4	FRDC 2006/057 report: Development of a national environmental management and accreditation system for business/public recreational fishing competitions	137
5	National Released Fish Survival Program Travel Fellowship: Florida's 7th Annual Edison Big Snook Tournament 2006	109
6	National Strategy for the Survival of Released Line Caught Fish: Released Fish Survival Survey of Fishing Tackle Industry	92
7	FRDC 2004/071 report: Maximising Post-Release Survival of Line-Caught Flathead taken in Sheltered Coastal Waters	87
8	National Strategy for the Survival of Released Line Caught Fish: National Follow Up Survey report	85
9	FRDC 2001/101 report: National Strategy for the Survival of Released Line Caught Fish: A Review of Research and Fishery information	83
10	FRDC 2002/039 project: Assessment of Post Release Survival and Stress Physiology of Barramundi	83

6.3.2 Information Products

Recfishing Research has provided funding to a number of projects to assist with the extension of information. Some of the information products that Recfishing Research has helped fund or assisted with distribution include:

- ❑ Reprints of information pamphlets on best practices in releasing fish developed through the Released Fish Survival program;
- ❑ Additional copies of a Catch and Release pamphlet published by NSW DPI;
- ❑ Additional copies of 2 Barramundi pamphlet produced by NT Fisheries resulting from a Barramundi survival project;
- ❑ Additional copies of the National Code of Practice for Recreational and Sport Fishing produced by Recfish Australia;
- ❑ Additional copies of an information brochure and DVD on the Release Weight produced by Recfishwest;
- ❑ Pamphlet and CD on reports on Tagging of Stocked Fish in Impoundments and Waterways of Queensland in conjunction with Fisheries Queensland;
- ❑ DVD of FRDC segments from the "Escape with ET" television show.

Two other products were proposed but did not proceed.

A pamphlet promoting fish and environmentally friendly tackle was proposed to be developed in conjunction with AFTA. This was delayed awaiting the release of the AFTA report "Promoting a Sustainable Future for Recreational Fishing". At this time the report has not been released.

An instructional DVD on the correct procedures for tagging fish was also proposed however this was not supported by FRDC and did not proceed.

6.3.3 Rapid Response Information Service

A rapid response information service to provide factual information on emerging issues is still evolving. Many issues that are picked up by the media or are the subject of significant debate often have very little factual basis to the arguments. The aim of Recfishing Research is to provide factual information that can be used to improve the substance of information distributed.

This is a real challenge given the rapid distribution of information through the Internet. Recfishing Research has been able to correct some erroneous information circulating via the Internet eg. a photograph (*figure 6*) purporting to show a Barramundi of several hundred kilograms was in fact a Nile Perch caught in Africa. Recfishing Research was able to correct this information, at least in some of the networks.

On the flip side a photograph of a Marlin (*figure 7*) purporting to be caught in an estuarine creek was discredited as being a doctored photograph and a fake. However an investigation by Recfishing Research was able to establish that it was genuine and the fish caught in a creek (although not by the person with the flyrod) and this was fed back into the networks that were circulating the picture along with the correct story.



Figure 6: This photograph of a Nile Perch caught in Africa was circulated as being a Barramundi caught in the Fitzroy River (both Queensland and Western Australia)



Figure 7: Marlin photograph that was dismissed as a fake was in fact genuine

While these examples might appear trivial they are good examples of how misinformation can be rapidly circulated through the internet and be accepted as fact. Recfishing Research sees a need to rapidly assemble factual information to ensure reporting or debates on issues are based on the best information available.

In the recent Mako and Porbeagle Shark issue Recfishing Research did manage to assemble factual information on the status of these Sharks however the issue was determined before that information was able to be injected into the debate. That is an example of how rapidly these issues progress and how difficult it is to get factual information together in a timeframe where it can contribute to the debate.

This is an area that Recfishing Research will work on into the future, however will only play a role in assembling and distributing information and will not get involved in the debates. That is clearly the role of other groups such as Recfish Australia.

6.4. Assessing the Effectiveness of Recfishing Research

Towards the end of the project in the first half of 2010 Recfishing Research undertook a survey to examine the effectiveness of Recfishing Research. The survey was based on an online questionnaire on the Recfishing Research website and was undertaken by Pepperell Research and Consulting Pty Ltd. The target groups for the survey included recreational fisheries managers, researchers involved in recreational fishing research, FRAB members, peak recreational fishing body representatives, recreational fishing journalists and recreational fishers.

There were a total of 144 respondents which was considered an excellent response rate given the small size of the main target groups (excluding recreational fishers). A separate report providing an analysis of the results of the survey was completed. The key findings of the survey were:

- ❑ Overall awareness of Recfishing Research was very high in all respondents with 91.7% indicating at least some awareness of Recfishing Research before the survey;
- ❑ Researchers as a subgroup has extremely high awareness of Recfishing Research, all respondents having some awareness of Recfishing Research before the survey;
- ❑ Even among recreational fishers that were not part of the target group, there was high awareness of Recfishing Research (80% had some awareness);
- ❑ Of respondents who considered they had some involvement with Recfishing Research 63.1% had received reports, papers or information via email while 45.8% had viewed the website;
- ❑ Information delivered via email and the Recfishing Research website were rated especially useful by a significant majority of the survey target group;
- ❑ Those researchers who submitted proposals or preproposals to Recfishing Research for comment, found this process to be very useful;
- ❑ "Commissioning research to meet specific needs", "Disseminating the results of research" and "Maintaining a list of national recreational fisheries research priorities" were considered the most important in promoting and developing recreational fisheries research;
- ❑ "Wider/better dissemination of research information" was considered the most important area where Recfishing Research could improve its functions;
- ❑ Regarding future research in recreational fisheries, "Impacts/benefits of fisheries enhancement", "Impacts of recreational fishing on fish stocks" and "Impacts/benefits of Marine Protected Areas" rated most highly among respondents;
- ❑ Other areas seen as important for future research were "Impacts of commercial fishing/effects of closures" and "Social aspects of recreational fishing";

- ❑ "Wider/better dissemination of research information" was considered the most important area where Recfishing Research could improve its functions and role;
- ❑ The main fish species deemed to be in need of future research were pelagic 'gamefish' and tropical reef species;
- ❑ Fishing magazines and the Recfishing Research website were the preferred method of delivery of information on recreational fishing research.

7. DISCUSSION

Recfishing Research has developed a Business Plan that identifies the national priorities for RDE, the key areas for investment and the priority areas for investment. This now provides the foundation for where Recfishing Research should invest its resources and a sound basis for its advice to FRDC on national investment priorities. The challenge now is to develop projects that address these issues.

The Status Report provides a good indication of what is being done to address those issues. As these issues are adequately addressed from a national perspective then their priority needs to be reviewed. The recfishing landscape is constantly changing with new issues emerging. Recfishing Research will need to continue to monitor that landscape to ensure that new issues are encompassed in the Business Plan. Therefore the Business Plan needs to remain a dynamic document.

Recfishing Research has made some progress in the area of extension through the development of the extension network, the improvement of the website and the development and distribution of information products. However this is an area where more needs to be done and that is being addressed in the next phase of Recfishing Research. Particular attention will be paid to the use of new and emerging communications media (eg You Tube) to reach younger and "tech-savvy" constituencies.

The survey of awareness of and the effectiveness of Recfishing Research has confirmed that there is a high level of awareness and it has been able to effectively engage its main target groups. The challenge for the future is to continue to broaden the Recfishing Research network and broaden the base of people that interact with Recfishing Research.

8. FURTHER DEVELOPMENTS

Conditional approval has been provided by FRDC to the next phase of Recfishing Research, addressing the national research and development priorities and improving extension.

The RFAC is working towards a revised National Policy on Recreational Fishing and a Recreational Fishing Industry Development Strategy. It is likely that projects identified by the RFAC will be managed by FRDC and Recfishing Research is expected to play a role in the development of these projects. Projects identified by Recfish Australia may also be developed.

In the next phase of Recfishing Research it is proposed that an Extension Service be developed as a self sustaining business. Recfishing Research will work closely with the new FRDC Extension Program to develop this service.

A particular challenge for Recfishing Research will be how to get information into the networks that younger fishers are using. It is expected that forums such as YouTube, Facebook and Twitter will need to be tapped into to provide new opportunities for getting information to those that use these networks.

There has been some concern expressed by Recfish Australia about the roles of that body and Recfishing Research. It is proposed that a MOU will be developed to more clearly identify the roles of each body.

9. CONCLUSIONS

It is considered that Recfishing Research has been able to gain support from a wide range of recreational fishing organisations and groups.

