

Pilot project for a national database on fisheries R & D capacity

R N Stevens



Australian Government

**Fisheries Research and
Development Corporation**



Project No. 2002/321

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OBJECTIVES

1. To conduct a fisheries R&D capacity audit for Western Australia.
2. To collate the results of the audit into a self-maintaining database, capable of interrogation by stakeholders.
3. To provide the database to the FRDC to expand it nationally.

Acknowledgments

The project could not have been completed without the assistance of Simon Gare, Echidna web-design who actually constructed the database, and who made correction after correction with indefatigable good humour. This report firmly recommends that any continuation of this database continues to employ the company that designed it. The FRDC is thanked for co-funding this project with the Western Australian fishing industry via the Minister for Fisheries' Industry Development Unit.

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NON TECHNICAL SUMMARY:

The objective of the project, to produce a comprehensive database of research providers in Western Australia, was achieved.

Each of the major research institutions has entries, complete with Units within those institutions and the people that make up those Units. This system parallels the FRDC database.

The database satisfies the criteria for its construction and operation, viz:

1. Making an entry is straightforward, particularly for those who read the simple instructions first.
2. Altering an entry is also simple, and each entry is password protected
3. Each entry must be vetted by the Administrator before it appears on the website. When an entry is submitted, an e-mail is automatically sent to the administrator who may view the entry and, if necessary, check its content prior to authorising its addition to the database.
4. The database is divided into four sections for entries:
 - a) Institutions such as University or Government agencies;
 - b) Units, which are always within institutions;
 - c) Personal entries of people who belong to a Unit, and
 - d) Individual entries for people such as consultants who do not belong to a Unit of an Institution.
5. The database divides the particular skills of entrants by:
 - a) Pre/Harvest (including oceanography and marine biology, habitat research and research on fish stocks etc.
 - b) Harvest, including catching methods, by-catch reduction/utilisation, gear and vessel technology and OH&S
 - c) Post harvest, including product quality
 - d) Economics and marketing
6. The database may be searched by any of the above, or by keywords, and a combination of search words shows only those entries that display all of the words in the search.
7. The database may be found at www.wafic.org.au under research and development.

KEYWORDS: Fisheries R&D database; fisheries R&D Search Engine; www.wafic.org.au

OUTCOMES ACHIEVED TO DATE:

The directory is unique.

The data in the directory allows people to search for a suitable person (or institution) to engage in R&D on their behalf. It also allows reviewers of FRDC project applications to check the expertise of applicants.

All putative principal and co-investigators for FRDC project applications from Western Australia must have an entry in the database for the project to be considered by the WA fisheries research advisory body (FRAB).

From an individual's point of view, it creates a web-based CV that they can offer to prospective clients, and which can be updated at will. Further improvements will allow an entry to be downloaded as a printable version, allowing people to store their CV in a location that is instantly accessible.

The database was designed to be naturally expanded to cover institutions throughout Australia, so has been transferred to the FRDC for its use.

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BACKGROUND

A major strategy meeting of eclectic people interested in fisheries R&D and stakeholders in Western Australia was held in June 2002. The meeting resolved to draft a new strategy for fisheries R&D for the State. The meeting recognised, however, that many stakeholders were unable to make informed decisions about who were both capable and available to conduct research and development on their behalf. This limited their choice of researcher, and research institution to those that they knew, or those who approached the stakeholders with a research project.

The meeting recognised that this was a major impediment to conducting cost efficient and effective projects. It also limited the ability of stakeholders to encourage collaborative research projects, where this might achieve their desired result in a more effective manner. The meeting participants believed that a database of researchers and institutions, that was self-maintaining and capable of interrogation electronically (via a website) would satisfy the requirements of stakeholders, and allow a strategy for R&D for the State to be prepared.

NEED

There is a need to discover what human resources are available to the State and what their individual field of R&D is. This need extends to research institutions and their capacity to conduct R&D. Once collected, the data needs to be compiled into a database that is largely self-maintaining via the ability for those registered to be able to change significant details themselves, thus continuously updating the database. The need for such a database extends to the whole country, but it is necessary to conduct a pilot project to determine what exactly what data is required, and how the data may be sorted by people looking for one or more people to solve a particular problem.

OBJECTIVES

4. To conduct a fisheries R&D capacity audit for Western Australia.
5. To collate the results of the audit into a self-maintaining database, capable of interrogation by stakeholders.
6. To provide the database to the FRDC to expand it nationally.

METHOD

1. The project first reviewed who has done research in WA in the last ten years (FOB>20% in the last 10 years including a real presence in WA)

This list will include the Department of Fisheries; 5 Universities; 5 TAFE Colleges (including the regional TAFE colleges); CALM; the WA Museum; the WA Waters and Rivers Commission; AIMS; CSIRO/SRFME; Private R&D providers, Industry itself and industry associations eg PPA, WAFIC, R/L Council, Recfishwest.

2. The review covered capacity in the four major fields of R&D viz:

Pre/Harvest, including oceanography and marine biology, habitat research and research on fish stocks

Harvest, including catching methods, by-catch reduction/utilisation, gear and vessel technology and OH&S

Post harvest, including product quality

Economics and marketing

3. The review was conducted by questionnaire.

Questions included:

1. Name of individual and qualifications
2. Location
3. Areas of expertise
4. Publications (during the last ten years)
 - Internationally refereed
 - Nationally refereed
 - Non-refereed
 - Conference papers
 - Other
5. Extension of research results and application of R&D findings in the last ten years.
6. Other relevant Professional Activities in the last ten years.
7. Laboratory and /research infrastructure (by group).

4. The questionnaire was accompanied by a Covering Note:

“The reason for the survey is to identify all the areas of expertise related to fisheries R&D in WA.

This will allow us to match appropriate skills to R&D questions raised by stakeholders. It will allow MAC’s and the WA FRAB to be sure that people with appropriate skills are invited to address priorities for R&D. It will also identify gaps in R&D capability that might be addressed through Human Capital Development (recruitment and training)

It will also be a resource for researchers to identify people who can join research and development teams.

The details will be kept by the WA FRAB in a database that will be updated at least every four years. The database will be publicly available via a website. (Individuals may request that significant changes are made to their details e.g. qualifications, or their location at any time)”

5. Database development. It was critical that the database be designed in a format that is easily accessible and in such a way that an ordinary person can interrogate it by the subject of their interest. This was carried out by the co-investigator using confidential database software developed by the company and offered to the project on the basis that further development would be carried out by the co-investigator.

OUTPUT

The first comprehensive, self-managed R&D Database for fisheries in Australia.

OUTCOME

The directory is unique. It is a living document that may be updated by individual entrants at any time, providing instant access to a body of research and development expertise that is unequalled anywhere.

The data in the directory allows people to search for a suitable person (or institution) to engage in R&D on their behalf. It also allows reviewers of FRDC project applications to check the expertise of applicants.

All putative principal and co-investigators for FRDC project applications from Western Australia must have an entry in the database for the project to be considered by the WA fisheries research advisory body (FRAB).

Benefits

From an individual's point of view, it creates a web-based CV that they can offer to prospective clients, and which can be updated at will. From a searchers point of view it allows access to all the major providers of fisheries R&D in Western Australia.

Further development

The database was designed to be naturally expanded to cover institutions throughout Australia, so has been transferred to the FRDC for its use. Further improvements will allow an entry to be downloaded as a printable version, allowing people to store their CV in a location that is instantly accessible.

CONCLUSION

The database provides a unique tool for the efficient assessment of fisheries R&D expertise. It is simple to enter, modify and access so giving both research providers, clients and reviewers instant access to a body of researchers in a form that, to the knowledge of the author, is not available anywhere else in the world.