

**FISHING FOR ACCURACY:
AUSTRALIAN INPUT TO THE AQUATIC SCIENCES AND FISHERIES
ABSTRACTS (ASFA) DATABASE**

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ABSTRACT: This paper outlines the background to the establishment and operation of the Australian input centre for the ASFA database and the logistics for obtaining Australian content. It provides a personal account of the intellectual and technical challenges for a sole practitioner, of the information specialist versus subject specialist debate and describes the 'better than DOS' web interface to the ISIS software. The importance of the active collaboration with the FISHNET group of marine science librarians around Australia is emphasised and initiatives to develop new modes of communication between the indexer and the content providers are described. The focus of this paper is a personal view of this truly international venture, rather than an authoritative explanation of the structure and operation of the complex organisational cooperation that supports the Australian Input Centre.

Background information to the Aquatic Sciences and Fisheries Abstracts (ASFA) database

The ASFA bibliographic database is the principal information product of the Aquatic Sciences and Fisheries Information System (ASFIS), an international co-operative information system for the collection and dissemination of information covering the science, technology and management of marine and freshwater environments.



The ASFA database contains more than 900,000 bibliographic references (or records) to the world's aquatic science literature accessioned since 1971, with a current monthly input of 3,500 references. It is an invaluable information resource for a variety of users including scientists, administrators, aquaculturists, technologists, environmentalists, people in the fishing and other marine industries, students and academics.

The production of the ASFA database is a co-operative effort by the United Nations Co-sponsoring Partners, the National and International Partners, and the Publishing Partner. The objective is to disseminate bibliographic information in the defined subject areas to the international community. All ASFA Partners are represented on the ASFA Advisory Board, for which the Food and Agricultural Organisation of the United Nations (FAO) in Rome provides the Secretariat (FAO Fisheries Department 2004).

Establishment of the Australian input centre for the ASFA database

In 1992, a Fisheries Research and Development Corporation (FRDC) grant was awarded to CSIRO Division of Fisheries, for a trial year of operation of an Australian Input Centre which would monitor, index, abstract and prepare ASFA input of between 300-400 items p.a. These arrangements for the input of Australian material were not fully operational until late 1995. It became apparent that not only were many journals monitored for ABOA (*Australian Bibliography of Agriculture*) relevant to ASFA but also the database structure, record specifications and field definitions for ABOA and ASFA were similar, although the thesauri and subject indexing rules were significantly different.

A comprehensive account of this background and the arrangements to establish a permanent Australian Input Centre for contributing Australian material to the ASFA database recommends that:

- a permanent centre for inputting Australian material into ASFA be established
- FRDC fund the preparation of records as part of the contract for production of the ABOA

- the FISHNET group of libraries continue to monitor publications not on the ABOA list
- CSIRO Division of Fisheries continue as the Australian partner on the ASFA Board
- the Librarian, CSIRO Marine Laboratories, coordinates input (in effect from Tasmania and also by coordinating the FISHNET librarians' input).
Abbott (1996)

CSIRO ceased production of ABOA after 1995, and Infoscan (an information management consultancy) gained the contract for ABOA. It was decided that Infoscan should also be contracted to incorporate the ASFA database input with its production of ABOA. Infoscan was responsible for managing the Australian Rural Research in Progress (ARRIP) and Streamline databases, as well as ABOA, so there was even more synergy in identifying sources of information relevant to the ASFA database.

These three companion databases, ARRIP, ABOA and Streamline, were originally integrated in 1996 and have been now developed into a knowledge base and a single access point for research and innovation on Australian agriculture and natural resource management, Australian Agriculture and Natural Resources Online at <http://www.aanro.net>.

Infoscan (2004)

Infoscan allocated the responsibility for preparing ASFA database input to me, as an experienced database indexer and editor, especially in scientific areas. I had been indexing for ABOA and indexing and editing for Streamline for Infoscan and I was familiar with DOS (apparently an unusual skill to have retained). The software being used for ASFA database input was Micro CDS/ISIS, operating in a DOS environment.

My contract with Infoscan for the Australian input to the ASFA database began in late 1998 and continues to the present, on an annual basis, subject to FRDC continued funding.

Logistics to obtain Australian content for the ASFA database

As a National Partner, Australia is responsible for the monitoring of serials, monographs and other information relevant to the scope of the ASFA database, published in Australia, and for preparing bibliographic citations, indexing and abstracts of relevant literature for input to the ASFA database.

Since 1998, the responsibilities for identifying and collecting input are effectively organised by Infoscan and Denis Abbott in his role as coordinator of the FISHNET librarians, the group of Australian librarians working in the major marine and freshwater research institutions across Australia.

Infoscan have a staff member responsible for scanning Australian journals, including those identified on the Monitoring List as supplied by the FAO, and for identifying articles which meet the relevance criteria: literature dealing with the science, technology and management of marine, brackish and freshwater environments, organisms and resources, including economic, sociological and legal aspects.

THE SCOPE OF ASFA INCLUDES ALL ASPECTS OF THE AQUATIC ENVIRONMENT

FISHERIES	
AQUACULTURE	
POLLUTION	
BIOLOGY	
BIOTECHNOLOGY	
NON-LIVING RESOURCES	
OCEANOGRAPHY	
CONSERVATION	
MANAGEMENT	

Because this scanning is also being undertaken for the databases included in AANRO, there are synergies and economies of effort, as well as the bonus of finding relevant items in unexpected sources. Journals not previously identified contain articles from non-core journals for inclusion in the ASFA database on an occasional basis. All serial details are coordinated by FAO, who maintain the Monitoring List as an authority file.

Currently, photocopies of relevant journal items are sent to me in batches and in addition, the FISHNET librarians supply me with their hard copy organisational publications and acquisitions which match the criteria, with CSIRO Marine Research being the major contributor.

Intellectual and technical challenges for a sole practitioner

The initial challenges were of course familiarisation with the new and quite complex database structure and input format, from information in the detailed manuals prepared by FAO. In addition, the FAO staff patiently monitored and edited my work for the first twelve months of input until I became familiar with the specific intricacies of the ASFA database and the ISIS software.

While I have indexed input for many varied databases over the years, each database presents new challenges of format, field definition and protocols. The ASFA database has very rich indexing elements in that, in addition to subject descriptors allocated from the ASFA Thesaurus, there are taxonomic descriptors, geographic descriptors, identifiers, and primary and secondary classification codes. These controlled vocabularies are supported and maintained by FAO. As you will be aware, Australian taxonomic names and geographic names are many and varied and so local terminology can be added to the records.

Working in isolation is not a factor that I find difficult to deal with, as concentration is required for any indexing work. I have email connection with the FISHNET group, located all over Australia, and occasional opportunities (as this conference has provided) to meet face to face with my colleagues. Since that first year of FAO oversight of my input prepared for the ASFA database, I find the greatest challenge is self-editing and reviewing my own work.

The initial technical challenges were generated by the unforgiving nature of the DOS-based Micro CDS/ISIS software, where work could be deleted by a careless keystroke, without the benefit of an 'undo' function. Extracting records from the database to be submitted to Cambridge Scientific Abstracts (CSA) (the database publisher, based in the US) also took time for familiarisation, despite the excellent FAO manuals and unstinting support and advice from the staff at CSA.

The transition to the web-based software, www-ISIS-ASFA, has of course been an improvement in many ways. I have several comments on how the 'better than DOS' web interface to the ISIS software could be improved operationally for record creation and output. I will save them for another time as they require exploration of the detailed usage of the input forms and indexes and I am evaluating the functionality of the software solely from my own point of view as an indexer.

Certainly, the input process, though lengthy, has been streamlined and one of the major bonuses is that scanning indexes for consistency and searching the created records by a number of different parameters is much more user friendly than with the DOS version, so the process of checking for accuracy and consistency in my work is more efficient. Completed records are more easily prepared for email submission to the database publishers, CSA, as a file in ISO format. CSA is then responsible for merging the input from contributors across the world to create the ASFA bibliographic database.

A major limitation for me was not having access to the ASFA database, which is invaluable for checking my own practice against the database for consistency and comparison. As a freelance indexer, I was not attached to an institution which subscribed to the ASFA database, but that problem was rectified earlier this year when CSA supplied me with the complete database on CD-ROM and I have just received instructions to gain access online as well.

The information specialist versus subject specialist debate

I have very strong views on the generic and transferable skills of competent information professionals. For some years, I have worked in academia with aspiring library and information professionals at undergraduate and postgraduate levels, where the objectives are to ensure that students do not simply focus on 'how stuff works' but acquire a thorough understanding of underpinning theory and principles.

An information specialist, specifically an indexer, can:

- organise recorded knowledge in any of its formats;
- analyse the structure and content of particular works;
- express complex ideas concisely;
- arrange information systematically into a helpful order;
- create finding aids (i.e. indexes, abstracts, subject gateways) to help users find information quickly;
- add value to a project by providing many access points to information.

(Australian Society of Indexers 2004)

Indexing may appear to be a mechanistic exercise i.e. driven by thesauri and authority lists, but within that framework, I find indexing is an engaging exercise: not 'just' cataloguing details, but understanding and interpreting the content, intent, methodology, recommendations and aspirations of authors.

In addition, subject expertise is desirable when indexing resources for specialised databases and I had relevant expertise from indexing and editing the Australian databases referred to above, as well as working as a special librarian for regional and urban water authorities.

Major frustration for an indexer is caused more by dealing with the stylistic and bibliographic inadequacies of many publications than by spending that extra time interpreting difficult subject matter. Responsibility for producing many organisational publications has been delegated away from skilled, centralised publications or editorial units. Consequently, the ineptitude of many authors to express themselves clearly puts a great responsibility on the indexer to construct a meaningful abstract.

In effect, correcting bibliographic gaps and inconsistencies in publication details, inaccurate or varying versions of the form of authors' names, titles, dates, and series

naming and numbering, takes just as much time and energy to unravel as complex subject content.

Importance of active collaboration with FISHNET librarians around Australia

Having worked as a special librarian in research environments, I understand the institutional constraints that the FISHNET librarians work under. I appreciate the regularity with which they identify relevant recent reports and publications, as well as earlier publications that may have been overlooked. Being able to add items previously overlooked contributes to the quality of the database as an information resource for users.

Because I work in freelance mode and am not solely occupied in the ASFA database indexing, there can be inevitable delays. I try to minimise these delays, so that information about recent Australian literature is added to the ASFA database and available for searchers to access as speedily as possible.

Developing new modes of communicating content

Recently, CSIRO Marine Research and I have been trialling a way of attempting to reduce the burden of sending parcels of hard copy print material from one part of Australia to another. Given the increase in the number of publications available in full text over the Internet, I have requested that CSIRO initially send me bibliographic details instead of hard copies of publications and then I can identify those available online.

The rate of full text availability online is variable from one issuing organisation to another, but I will be collaborating with the FISHNET librarians to minimise the need for them to send hard copy (which sounds anachronistic, but has worked well in lieu of any other method). As greater online access to articles would certainly assist the indexing process, I am also exploring with Infoscan the access to journal content online, but unfortunately full text is often unavailable.

Australian input to international databases

It is clear from the annual quota of 300-400 items from Australia for input to the ASFA database that the national input is comparatively small. Concerns have been raised in many scientific disciplines about the increasing frequency of Australian authors seeking to publish in overseas journals with a high impact factor. For all of the stakeholders, participating in this initiative is important in ensuring international coverage for Australian research and practice in the ASFA database subject areas.

APPENDIX I

WHAT'S NEW (OR CHANGED) in WWW-ISIS-ASFA (release-1)

Comparison of ASFA field definition tables between DOS-ASFISIS and www-ISIS-ASFA

ASFISIS Field name	WWW-ASFA
TRN Input Centre Code (sub-field a) Sequential number (sub-field b)	no change
Environment	no change
Document type	no change
Bibl. Level	no change
Lit. Style	no change
Physical medium	no change in meaning, just new values provided
Date of update	no change
Status of the record	If the value is T it means Temporary record and should not be sent to CSA
Author	now subfielded with: ^a name ^b role (ed, transl, comp.) ^c flag for correspondence if present and equal Y the address (V509) refers to the flagged author
Corp. Author Main body (sub-field a) Location (sub-field b) Subpart (sub-field c)	No subfields in the field
Eng. Title	If the field V121 =T it is translated by indexer and the field V124 exists (in ISO2709 it is not anymore in ..)
NEW Translated by imputter	See V120
Orig. title	no change
Author (monogr) (at monographic level)	now subfielded with: ^a name ^b role (ed, transl, comp.) ^c flag for correspondence if present and equal Y the address (V509) refers to the flagged author ^c applies only for the Monograph worksheet.

ASFISIS Field name	WWW-ASFA
Corp. Author Main body (sub-field a) Location (sub-field b) Subpart (sub-field c)	No subfields in the field anymore
Eng. mon. title (at monographic level)	If the field V221 =T it is translated by indexer and the field V224 exists (in ISO2709 it is not anymore in parentheses (..))
NEW Translated by inputter	See V220
Orig. mon. title (at monographic level)	No change
Edition	No change
ISBN	No change
NEW Serial title (full-title)	NEW
Serial title (abbreviated)	No change
ISSN	No change
NEW Electronic ISSN	NEW
Author (col. lev) (collective level)	now subfielded with with: ^a name ^b role (ed, transl, comp.)
Corp. Author 3 Main body (sub-field a) Location (sub-field b) Subpart (sub-field c)	No subfields in the field
Eng. col. title	If the field V421 =T it is translated by indexer and the field V424 exists (in ISO2709 it is not anymore in parentheses (..))
NEW Translated by inputter	NEW See V420
Orig. col. title	No change
Edition 3	No change
Author address Building/inst. (sub-field a) Street+city (sub-field b) Country (sub-field c) e-mail (sub-field e)	No change in the structure Note: the address in this Authors field where the subfield ^c=Y
Author degree	No change
Conference name	No change

ASFISIS Field name	WWW-ASFA
Conference loc.	No change
Conference date	No change
Report/Doc.No.	No change
Imprint Place of publ. (sub-field a) Publisher (sub-field b)	No change
Date of publ.	No change
Collation Volume (sub-field v) Issue (sub-field i) Pagination (sub-field p)	No change
Languages Lang. text (sub-field a) Lang. summary (sub-field b)	Now V600 is Lang. text has no subfields - it contains only languages of text
Online avail./URL address	
NEW Lang. summary	Only in WWW-ISIS/ASFA it contains languages of available summaries
Notes	No change
Abstract	No change
2nd Abstract	Now repeatable
Local Availability (THIS FIELD IS NOT EXPORTED TO CSA)	No change
NEW Online availability/URL address	NEW
NEW Digital Object Id (DOI)	
Subject descr.	No change
Local Index Terms (THIS FIELD IS NOT EXPORTED TO CSA)	No change
Taxon. descr.	No change
Geogr. descr.	No change
Identifiers	No change
ASFA strings Journal (sub-field a) Category (sub-field b) No-print terms (sub-field c)	Subfield c deleted
X-ref. X-ref. Journal (sub-field a) Category (sub-field b) Phrase (sub-field c)	No change

FAO (2002)

REFERENCES

Abbott, Denis 1996. *Australian Fisheries Research publications database: an Australian input centre for the Aquatic Sciences and Fisheries Abstracts database*. CSIRO Division of Fisheries, Hobart, Tas.

Australian Society of Indexers 2004. *Guide for clients* [Online]. Available: <http://www.aussi.org/profissues/clients.htm> [Accessed: 30 August, 2004].

FAO 2002. *Stand-alone computer environment: instructions for installing www-ISIS-ASFA (release-1) software system*. FAO, Rome.

FAO Fisheries Department 2004 *ASFA Aquatic Sciences and Fisheries Abstracts* [Online]. Available: <http://www.fao.org/fi/asfa/asfa.asp> [Accessed: 31 August, 2004].

Infoscan Pty. Ltd. 2004. *Australian Agriculture and Natural Resources Online* [Online]. Available: <http://www.aanro.net> [Accessed: 28 August, 2004].

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