NEW WRINKLES ON THE WAVES CD

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ABSTRACT

A year ago the first WAVES CD-ROM VAGUES was released for sale. It carried two databases: the WAVES/VAGUES database and the Directory of Marine and Freshwater Scientists in Canada. During the past year updated discs have come out at approximately quarterly intervals. During this time a new database, AQUAREF, from Environment Canada has been added. This is a database of some 80,000 records on topics related to water resources, mostly of a freshwater nature. Another enhancement to the CD included an ILL module to facilitate ordering material from the WAVES database. The CD also includes a tutorial designed to help users learn basic techniques of searching.

INTRODUCTION

At last year's IAMSLIC conference the then very new WAVES CD-ROM VAGUES, to use its official name, was demonstrated. I mentioned some aspects of the CD in my paper (Marshall, 1991) and Audrey Conroy (1991) discussed the preparation and use of standards by the libraries contributing records to the database. Further information on the history of the WAVES/VAGUES database is to be found in Sutherland (1988).

I will first briefly describe the software used. The CD as first issued will be described and then the new material and other enhancements added over the year will be discussed.

SOFTWARE

CD Author, from Dataware, is the software used to develop the application for the CD. CD Answer retrieval software, from the same company, is used for retrieval. The same software is used on the NISC CDs. The software is, I think, one of the better CD search software packages currently available. In 1990 the Optical Publishing Association gave its award for "Best Retrieval Software" to Dataware for CD Answer.
The search screens are clear and user-friendly. The search screens for the different databases are slightly different in their details as each database has different field structures. The user types search terms in the appropriately labelled box (e.g. subject or author or date) with Boolean connectors. The basic or subject index box is always at the top of the first search screen. Phrases are input with no quotation marks. The results of a search appear as a list of titles when there is more than one item. This list can be sorted and items selected for fuller display. This full display can be customized. Output to a printer or to memory can be customized independently of the display format.

The software operates by a series of windows, called up by using a function key, the purpose of which is indicated at the top of the screen (see Fig.1).

A series of preliminary screens allow the selection of either English or French as the operating language (a requirement in the Canadian federal environment). The selection of the database which is to be searched and some other options, including a tutorial, will be discussed later. The search software is supplied on the CD itself and not on separate floppy diskettes as with the ASFA CD.

A new release of software from Dataware has recently reached the producer of the CD and we await with anticipation the application of appropriate new or improved features to the WAVES CD.

**1990 CD**

The first CD carried two databases:

**WAVES/VAGUES** - WAVES is not an acronym. When selecting a name for the database we needed one which could also be translated in French and still be brief. This database is a catalogue of material held in the 13 libraries of the Department of Fisheries and Oceans (DFO). It must be understood that by no means all of the holdings of these libraries are currently in the database.

Over the past decade priority has been given to inputting the "gray" literature which is not well covered by other databases. Within our department we had a need to be able to retrieve the many reports produced as a result of work done on contract for us and prior to the production of WAVES this was difficult. The database contains records of almost all of the various report series issued by our department both under its present name and that of its predecessors (including the Fisheries Research Board of Canada). Most of our translation series have also been entered. Individual papers from periodicals and conference proceedings are not normally entered because ASFA and other databases cover this type of material. Although not viewed as a high priority, a number of libraries have started to enter commercially published books into the database and more will be added as time passes.

The database also includes records of other report series held in our libraries.
For example, ICES and NAFO reports have been indexed. FAO reports and reports from many fisheries and oceanographic agencies, from both within and outside Canada, have been added. In many cases our entire holdings of the sets have been indexed. This is in contrast to the commercial databases, which usually start their coverage at a particular publication year. Material in WAVES goes back to the end of the 17th century. The earliest entry is dated 1694, the next oldest is 1767, and there are over 200 from the 1800's.

A total of between 200 and 500 new records are added each month by the various DFO libraries and additional holdings information may be added to existing records. Any errors noted in the database may also be corrected. Some 80,000 records are currently in the database. Again, in contrast to most other databases, there is a field noting which library or libraries hold each item. The additions and changes are made to the online database which is maintained as a private file on the Informsart system which uses BASIS software. A copy of the complete file is provided from which the CD is mastered every three months.

Directory of Marine and Freshwater Scientists in Canada - this directory was published by DFO in 1989 as Special Publication of Fisheries and Aquatic Sciences No.104. It forms a relatively small database on the CD and can be searched to find the address of a specific person or to find who is working on a specific topic.

1991 ENHANCEMENTS

AQUAREF - this database, produced by the WATDOC Section of the Inland Waters Directorate of Environment Canada, covering water resources and related environmental topics mostly of a freshwater nature, was added to the CD in early 1991. The database contains over 83,000 records; most are dated 1970 or later, but a few records are of an earlier date, going as far back as 1908. In contrast to WAVES, AQUAREF does include journal articles. Reports and publications from Canadian government agencies and research institutions are also covered. Conference proceedings are covered, with relevant papers being separately indexed. In many cases there is an indication of which library holds each item. The Aquaref database is available to searchers in Canada on the CAN/OLE system operated by the National Research Council of Canada.

As might be expected, there is some duplication of records between AQUAREF and WAVES. For example, when I searched both databases for my own publications, WAVES yielded 21 records and AQUAREF 66. On close examination I found the large number on the latter was due to two conference proceedings which I helped edit being covered. Each paper was indexed with the editors and the authors in the author field. There were 11 records common to both databases. AQUAREF stopped indexing DFO reports in 1984 so recent reports that I have authored are not listed. The reason for this change in policy arises from a reorganization of government departments. In the 1970s there was a single Department of Fisheries and the

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Environment. In 1979 this was split into the Department of Fisheries and Oceans (DFO) and the Department of the Environment (DOE). For a few years DFO continued to provide indexing for our reports for DOE to include in AQUAREF. In April 1984 a decision was made to stop doing this and concentrate on ASFA input.

A search for items on "water quality AND oxygen AND Manitoba" gave 25 hits on both databases and there were no items in common. As might be expected AQUAREF contains fewer references to fish and fisheries than WAVES since the mandates of the two departments also differ in this area.

Order Documents (ILL) - This is another new feature which appeared in early 1991. As already mentioned the WAVES database indicates which DFO libraries hold the items listed. To simplify ordering interlibrary loans OPTIM, the CD-ROM publisher/producer, was asked to develop this module.

It functions in a relatively simple manner only with the WAVES database. Locate the item or items required in the database and download each using a special format as follows. ILL RECORD is selected from the TEXT FORMAT options on the OUTPUT (F-5) windows (Fig.1). The record is output - TO FILE (i.e. downloaded) and given a name (e.g. the user's name - SMITH) and the system automatically adds the extension "ILL". Each item must be downloaded as a separate file.

When the search session is complete exit from the search mode to the preliminary screen and select ORDER DOCUMENTS (ILL). Select the appropriate file from the FILE SELECTION SCREEN (Fig.2). You may view a file to check that it is the correct one by using the F2 key (Fig.3). To return to the previous screen hit ESC.

To generate a request from the highlighted file hit ENTER. Now fill in the blanks on the screen (Fig.4 and 5) for patron's name, phone number, etc. and select the library you wish to send the request to.

The system will generate either a paper copy of each ILL request (Fig.6) which can be sent either via FAX or through the mail, or an ASCII file which can be sent via electronic mail. The address, phone numbers, etc. of your library are input into memory during the ILL software setup process. The addresses of the DFO libraries are in memory where they were stored automatically during the setup process, as these were on the CD supplied to you.

DFO libraries have some fears that this ease of generating ILL requests may lead to great increases in demands for loans as the CD becomes more widely distributed. Incidentally the ILL policies of all of the libraries are given in the WAVES CD manual so that borrowing libraries can check these out before placing requests.
### Table: Document Selection

<table>
<thead>
<tr>
<th>No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Alberta environment: evaluation</td>
</tr>
<tr>
<td>2</td>
<td>Experimental fishing at Dauphin</td>
</tr>
<tr>
<td>3</td>
<td>Some limnological consequences of Lake St. Martin whitefish study</td>
</tr>
<tr>
<td>4</td>
<td>Angler creel census in the LAK</td>
</tr>
<tr>
<td>5</td>
<td>Remote sensing to assess land</td>
</tr>
<tr>
<td>6</td>
<td>A fisheries survey of the Vall</td>
</tr>
<tr>
<td>7</td>
<td>A survey of the fishes utilizing the St.</td>
</tr>
</tbody>
</table>

**Output Type**  
- Formatted Text  
- Text Format  
- Output Fields  
- Details

**Load settings...**  
- Basic Record  
- Complete Record  
- ILL Record  
- Cataloging Record

**Save settings...**

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**Fig. 1.** Windows for selection of ILL RECORD for TEXT FORMAT.

**Fig. 2.** FILE SELECTION SCREEN showing which .ILL files are available.
Fig. 3. VIEWing GOLDFISH.ILL to check which item this is.

Fig. 4. Blank ILL screen awaiting input of Patron data, request # and other details.
Fig. 5. Completed ILL screen.

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**Request / 1224**  
**Date:** 08/14/91

**Patron Name:** MARTIN, J.
**Patron Phone:** 204-983-5170
**Delivery Type:** COURIER
**Special Instructions:** Needed urgently - before 08/20/1991

**TO:**  
InterLibrary Loans  
Pacihwe Institute Library  
501 University Crescent  
Winnipeg, MB  
Canada R3T 2N6

**Telephone:** 204-983-5170  **FAX:** 204-983-6285  **ENVOY:** ILL.NWFW

**Author:** Johnson, R.A.; Wichern, D.W.
**Title:** Applied multivariate statistical analysis
**Publisher:** Prentice-Hall, Toronto, Ontario
**Date:** 1982
**Location:** BNP  
QA278 J69

**FROM:**  
BNP  
Library  
Pacific Biological Station  
Department of Fisheries and Oceans  
InterLibrary Loans  
Hasson Bay Road  
Hasson, BC  
V9R 5K6

**Telephone:** (604) 756-7071  **Fax:** (604) 756-7053  **Attn:** Library  
**ENVOY:** DFO.LIB.NANAIMO  
**TELEX:** 044-8128

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Fig. 6. ILL order form generated by ILL module.
**Main Screen**

Highlight an option and press ENTER to select.

- Search a Database
- Tutorial
- Order Documents (ILL)
- Quit

*Fig. 7. Main Screen showing options for Tutorial and Order Documents, and also Release Notes.*

**Tutorial** - one of the problems with CD search systems in general is that there is a lack of training available to users. I am sure that in most libraries some sort of elementary training is offered either on a one-to-one basis (which is very expensive in staff time) or to small groups. However not all users attend these sessions and we asked OPTIM to produce a tutorial to guide users through the basics of searching the WAVES database. This is available as an option from a preliminary screen (Fig. 7). It works in a similar manner to the demonstration diskettes commonly provided by vendors. It does attempt to explain the use of Boolean logic, which is an area where we have found users, who are not familiar with computer searching, often have problems. Appendix 1 shows some of the opening screens of the tutorial.

**Release Notes** - a feature added to the June update is an option on a preliminary screen (Fig. 7.) which provides information on what is new on each update. Information is given on the status of each database that has been updated. Any enhancements to the software are also described along with their applications. Libraries may print these screens and post them near their workstations so that users are aware that a new update has arrived and what is new on it. Appendix 2 shows the information provided in the June release notes.

**ACKNOWLEDGEMENT**

I would like to thank Heather Cameron (HQ Library, DFO, Ottawa) for reviewing this paper.
REFERENCES


APPENDIX 1
The Opening Screen of the Tutorial

OPTIM Corporation
WAVES/VAGUES CD-ROM Tutorial

The purpose of this tutorial is to guide you through the basic techniques of searching and retrieving information from the WAVES/VAGUES database, and associated databases.

Upon completion of this tutorial, you will be able to:
- Compose a query
- Display your search results
- Print and download your search results
- Understand search logic

Spacebar - next Slide | Backspace - previous Slide | Home - Main | F1 - Help

OPTIM Corporation
Dataware CD Answer Tutorial

1. Basic search techniques
2. Display options
3. Output options (Printing and Downloading)
4. Search logic
5. Setup options

Enter a number to begin the tutorial | Press Q to Quit the Tutorial

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PARTS OF THE SEARCH SCREEN

Enter search term(s) in the fields below

Subject
Title
Name
Date

You can use the ↑ or ↓ keys to move between SEARCH FIELDS.

An arrow here indicates additional SEARCH FIELDS are found on the next screen. You can press PgDn to get to the next screen. PgUp returns to the previous screen.

Press F5, then C to erase all search terms

Descriptors
Location
Specific collection
Publisher
Notes
Language code
Call number
Document numbers

Some databases will have a second search screen for additional search fields, such as this one from the WAVES database. Directions on the screen will always tell you how to go back to another screen.

PgUp to return to previous screen

Connection: Spacebar - next Slide | Backspace - previous Slide | Home - Main | F1 - Help

Total:
F1:Help F2:Browse (Display) F4:Connection F5:Storage F6:Setup F7:Quit
APPENDIX 2
Release Noted Screens from June 1991 CD

<table>
<thead>
<tr>
<th>Release Notes: June 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>DATA:</td>
</tr>
<tr>
<td>The WAVES Database is now current as of June 15, 1991.</td>
</tr>
<tr>
<td>A new search field has been added to the COMPLETE SEARCH SCREEN.</td>
</tr>
<tr>
<td>The SECURITY CODE SEARCH FIELD allows you to identify records which contain unclassified or classified information, and to limit your search to either subset of the database. WAVES records for documents containing unclassified information have a security code of 1; those records referring to classified information have a security code of 3. Access to these documents is limited and III requests for them will be considered on a case-by-case basis.</td>
</tr>
<tr>
<td>The AQUAREF Database is now current as of June 27, 1991.</td>
</tr>
</tbody>
</table>

| FUNCTIONALITY:          |
| You can now move to the next (or previous) search term in each record by pressing Ctrl-PgDn (or Ctrl-PgUp). This is especially useful in long records, allowing you to move quickly through the record to see your search terms in context. |

<table>
<thead>
<tr>
<th>Release Notes: June 1991</th>
</tr>
</thead>
<tbody>
<tr>
<td>* Records are now numbered in List Display, enabling you to see where the record appears within the set of found documents. Since the number appears on the left side of the screen, it allows you to refer to the document numbers when using the F5: Output option.</td>
</tr>
<tr>
<td>Records which are printed (or captured in a file) now include the record number (Record ___ or ___) at the beginning of each record.</td>
</tr>
<tr>
<td>The software makes use of more sophisticated memory management, and of extended memory (if available), so users should no longer get the error messages typical of insufficient memory. The system will also make use of EMS or XMS memory if it is available. WAVES CD-ROM VAGUES should therefore now work in a networked environment without any problems.</td>
</tr>
<tr>
<td>This release also fixes some minor problems with the highlighting of ENTRY INDEX terms and selection/replacement of terms from the BROWSE window.</td>
</tr>
</tbody>
</table>