



AQUACULTURE CRSP 22ND ANNUAL TECHNICAL REPORT

AQUACULTURE CRSP DATABASE: FINALIZATION, MANAGEMENT, AND DISTRIBUTION

*Tenth Work Plan, Decision Support System Research 1 (10DSSR1)
Final Report*

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ABSTRACT

The Asian Institute of Technology (AIT) recently established a mirror site (<http://www.aqua-information.ait.ac.th/crspDB/>) to make available experimental data generated by the Aquaculture Collaborative Research Support Program (CRSP). The experimental data cover a variety of culture environments and practices from a number of countries across the world and span a period of about 20 years. The Aquaculture CRSP Database is a unique global aquaculture research resource and invaluable for researchers, educators and extension staff in aquaculture research/outreach worldwide. Wider and easier availability of the Database is of global importance to aquaculture planning, management and development, and also results in larger impacts of the Aquaculture CRSP. By providing the web-based Database, establishing an additional manned outlet (mirror website at AIT), expanding web linkages, distributing the Database in the forms of CD and Zip disk, the Aquaculture CRSP Database can be accessed by a wider international audience. It also ensures continuous availability of the Database in the event of any temporary shutdown of the main Aquaculture CRSP Database website, which is maintained at Oregon State University.

This mirror site not only enhances worldwide availability of the Aquaculture CRSP Database, but also helps reduce the Database download time for users in Asian countries and to some extent in African countries. The same is true in terms of service time for user queries about the Database as well as requests for CD-based copies. The database is being promoted through flyers, technical workshops and paper presentations in aquaculture related conferences and meetings. Technical workshops and papers have been presented at the recent Joint Conference of the "Asian Federation for Information Technology in Agriculture (AFITA)" and the "World Congress on Computers in Agriculture (WCCA)" demonstrating various example applications of the database, including creation and download of datasets based on a number of user preferences.

INTRODUCTION

The Aquaculture CRSP Database is a unique global aquaculture information resource to serve the needs of aquaculture researchers, educators, and research/outreach extension staff worldwide. Wider and easier availability of the Database is of global importance to aquaculture planning, management, and development, and also results in the larger impacts of the Aquaculture CRSP. By providing a web-enabled database, establishing an additional manned outlet (mirror

website), expanding web linkages, and distributing the database in the forms of CDs and Zip disks, the Aquaculture CRSP Database can be made accessible to a wider international audience. It also ensures continuous availability of the database in the event of temporary shutdown of the main Aquaculture CRSP Database website at Oregon State University.

The objectives of this study were to:

- Complete data entry of the Eighth and Ninth

- Work Plans;
- Finalize the database residing on the BIOE server;
 - Establish a website with the identical final version of the database at the Asian Institute of Technology (AIT);
 - Backup the final version of the database on Zip disks;
 - Copy the final version of the database on CDs;
 - Provide a contact person to respond to database queries; and
 - Expand the linkages to other international/ regional aquaculture sites.

Work Plan Tasks and Accomplishments

This study was conducted at the Information Services Unit (ISU) of the Aquaculture & Aquatic Resources Management (AARM) at the Asian Institute of Technology (AIT), Thailand, during June 2002–August 2004.

The Aquaculture CRSP Central Database was maintained by the Management Entity from 1985 until 1993, when it was transferred to Kevin Hopkins at the University of Hawaii at Hilo. It was moved to John Bolte and Doug Ernst at Oregon State University in 1996. The database was significantly improved by John Bolte and Doug Ernst from 1996–2002. The database was received by Sahdev Singh and Yang Yi of AIT in June 2002 to complete data entry for the Eighth and Ninth Work Plans.

In early 2002, the Technical Progress Subcommittee of the Aquaculture CRSP Technical Committee identified outstanding data sets for the Eighth and Ninth Work Plans, however, these data sets were no longer available. The Program Management Office of Aquaculture CRSP decided that these outstanding data sets would not be included in the final version of the database.

Aquaculture CRSP database files were downloaded from the original site's FTP server (BIOE server, HYPERLINK "<http://www.aqua-information.ait.ac.th/biosys.bre.orst.edu/crspDB/>") at Oregon State University; the HTML files and scripts were edited and modified; the database website was configured using Cold Fusion script and Microsoft Access®; and the Database website (HYPERLINK "<http://www.aqua-information.ait.ac.th/www.aqua-information.ait.ac.th/crspDB/>") was set up on AARM server at AIT. The website was tested from remote locations and then deployed officially in May 2003.

Links to the Database website at AIT are being provided from several other sites of regional and international aquaculture/ fisheries-related organizations and aquaculture data websites, which are popular and regularly visited by aquaculture/ fisheries researchers (Table 1). However, some information gateways such as AGRIGATE and AGRIFOR have the Aquaculture CRSP

website (<http://pdacrsp.oregonstate.edu/>) listed with them, and therefore it is difficult to list the Database website separately. The webmasters of these information gateways are being contacted to rectify this problem.

A contact person (Yang Yi) has been assigned to respond to queries on the database. In a recent Joint Conference of the "Asian Federation for Information Technology in Agriculture (AFITA)" and the "World Congress on Computers in Agriculture (WCCA)," a technical workshop on Distributed Databases in Agricultural Research organized by Sahdev Singh and Yang Yi demonstrated various example applications of the Aquaculture CRSP Database, including the creation and download of datasets based on a number of user preferences. A paper entitled "A Web-Enabled Research Database for Experimental Data on Pond Dynamics/ Aquaculture CRSP (Singh and Yi, 2004)" was presented in the AFITA/WCCA 2004 held in Bangkok, Thailand during 9–12 August 2004, and published in the conference proceedings. More than 350 researchers from all over the world participated in these events. A flyer describing the CRSP Database was distributed during the events. The above workshop and paper presentation are available on the official website of AFITA/WCCA 2004 (www.afitaandwcca2004.net/).

The web version of the Aquaculture CRSP Database requires Cold Fusion software running on the web host server. This will not be possible with CDs or Zip disks as they are external media. However, it can be done with some additional programming to avoid using Cold Fusion scripts for search and display. Since the original database is in Microsoft Access®, VBScript can be used for search and display functions. One hundred CDs of the final-version Database have been made and will be sent to Aquaculture CRSP Program Management Office. Up to 1,000 CDs will be provided on a demand basis. The final-version database has been backed up on a Zip disk.

ANTICIPATED BENEFITS

This project has enhanced worldwide availability of the Aquaculture CRSP Database, and will also potentially help reducing the database download time for users in Asian countries and to some extent in African countries. The same is true in terms of service time for user queries about the database as well as requests for CD-based copies of the database. This project will benefit the global aquaculture community.

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Table 1. Links to the Aquaculture CRSP Central Database.

Institutions	Web site
AARM of AIT	www.aqua-information.ait.ac.th/aarmpage/
AGRIFOR	agrifor.ac.uk
AGRIGATE	www.agrigate.edu.au
APAARI	www.apaari.org
Asian Fisheries Society	www.compass.com.ph/~afs/
FAO (FishBase)	www.fao.org
NACA	www.enaca.org
OneFISH	www.onefish.org
SEFDEC	www.seafdec.org
World Aquaculture Society	www.was.org
WorldFish Center	www.worldfishcenter.org