AQUATIC COMMONS UPDATE

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ABSTRACT: The Aquatic Commons is a shared digital repository project aimed at making the grey literature of marine and aquatic sciences more globally available. The Aquatic Commons is a complementary project to the OceanDocs repository of IOC. The current status of the project is outlined along with anticipated future developments. Strategies are suggested for participation by IAMSLIC member libraries.

KEYWORDS: institutional repositories, grey literature

Digital Repositories in a Resource-Sharing Context

IAMSLIC has a long history of resource sharing that includes:
- MUSSEL, an early union list of serials held by IAMSLIC member libraries
- Long-term involvement with Aquatic Sciences and Fisheries Abstracts, which provides bibliographic access to the literature
- Use of the IAMSLIC listserv/online discussion list to advertise duplicate materials available to interested libraries and for broadcasting interlibrary loan requests
- The online Union List of Marine &Aquatic Serials and its regional subsets
- The IAMSLIC Z39.50 Distributed Library that enables simultaneous searching of catalogs and serial holdings of more than 80 member libraries
- The interlibrary loan module that enables requests to be emailed directly to the owning library

These resource sharing systems and services have been an effective means for locating and requesting copies of materials owned by other libraries, however they all ultimately rely on the lending library taking the time and effort to locate, copy and deliver the requested item. In order to move toward making the full text of publications more directly available, the Intergovernmental Oceanographic Commission (IOC) established the OceanDocs repository to collect, preserve and facilitate access to all research output from members of their Ocean Data and Information Networks (ODINS), while IAMSLIC developed Aquatic Commons for marine and aquatic institutions that do not otherwise have access to an institutional repository.

Institutional Repository Platforms and Standards

Digital repositories such as the Aquatic Commons and OceanDocs utilize standards-compliant, open-source software platforms that enable the uploading of digital versions of the full documents themselves, along with metadata records to describe them and to facilitate search and retrieval. Aquatic Commons runs on the EPrints software developed at the University of Southampton in the UK, while OceanDocs uses the DSpace system that originated at the Massachusetts Institute of Technology in the US. Both EPrints and DSpace support the Open Archive Initiative's Protocol for Metadata Harvesting (OAI-PMH) which means that metadata records for documents in the repositories can be automatically harvested into larger collections of records to facilitate searching across multiple repositories. This is a critical capability, as IAMSLIC seeks to provide a single interface to marine and aquatic resources from any and all repositories around the world, including Aquatic Commons and OceanDocs. Fred Merceur and his colleagues at IFREMER in Brest, France, have set up Avano as the central harvester to serve this role. Therefore, one may search the individual repositories independently if one chooses, but searching Avano provides the broadest possible retrieval from many dozens of repositories.

The Aquatic Commons

As stated on Aquatic Commons home page:

> The Aquatic Commons is a thematic digital repository covering the natural marine, estuarine /brackish and fresh water environments. It includes all aspects of the science, technology, management and conservation of these environments, their organisms and resources, and the economic, sociological and legal aspects. The repository contains a growing collection of published and unpublished research, organizational publications, and other scholarly materials contributed by researchers, librarians, and their institutions. It is directed by the International Association of Aquatic and Marine Science Libraries and Information Centers to provide visibility, usage and impact through global access to digital publications from worldwide marine and freshwater organizations that do not have access to an institutional repository of their own.

As of September 2008, the Aquatic Commons contained approximately 1,300 items from about 20 contributing institutions. The Aquatic Commons site receives 400-500 visitors per day, although its content is also searchable via the Avano harvester as described above. The Aquatic Commons Board recently issued revised guidelines for publication types and file formats to be included in the repository. Further details, documentation and policies are available via the Aquatic Commons page at http://www.iamslic.org/index.php?section=175 on the IAMSLIC website.

Future Directions for Aquatic Commons

Several initiatives have been identified that will further enhance the usability of the Aquatic Commons. Since it is a shared repository, further development is needed to integrate institutional branding such that contributing institutions can have a virtual subset of the repository that is clearly identified and can be searched and browsed independently. In order to support scanning and metadata creation at remote sites that do not have Internet access, a prototype "repository on a stick" has been developed that replicates the metadata creation tools on a USB thumb drive. Metadata records are created in the XML format that can subsequently be uploaded into the main Aquatic Commons database.

Another potential enhancement is the possibility of indexing all of the Avano metadata, which includes the Aquatic Commons, for searching via Z39.50. Such an index would become another resource within the IAMSLIC Z39.50 Distributed Library, with the advantage that records would link users to the full text of the content of publications in the repositories. Lastly, there are numerous existing collections of documents and metadata in IAMSLIC libraries that are not currently in OAI-PMH compliant systems. Such collections are candidates for data conversion projects to enable them to be incorporated into the Aquatic Commons.

Suggested Strategies for Repository Participation

- If you have an institutional repository that is broadly multidisciplinary, try to set up collections, sets or sub-collections to contain the marine and aquatic publications so that they may be harvested separately.

- If you are looking to set up a digital collection, prefer software platforms that are OAI-PMH compliant, i.e., the software enables metadata records to be automatically harvested by services such as Avano. In addition to institutional repository software like DSpace, EPrints, and Fedora, some digital library systems such as Greenstone support OAI-PMH harvesting of their records.

- If your institution is affiliated with one of the IOC's ODIN projects, plan to load records and documents into OceanDocs. The IODE office has well-established training and support programs from which all ODIN participants could benefit.

- If you are not in one of the ODIN project regions and do not have an institutional repository, plan to deposit records and documents into the Aquatic Commons. The Aquatic Commons Board is investigating resources for training and support.

References

Aquatic Commons home page http://aquacomm.fcla.edu

Aquatic Commons background http://www.iamslic.org/index.php?section=175

OceanDocs website http://iodeweb1.vliz.be/odin/