

# **National Sea Grant Library**

## **Biennial Report**

**January 1, 2001-December 31, 2002**

### **Collection Management**

The NSGL houses the only complete collection of Sea Grant work which now includes 29,330 titles. This collection represents a wealth of information covering nearly every discipline of marine science, including oceanography, fisheries, aquaculture, marine education, coastal zone management, marine recreation and law.

The 30 individual Sea Grant programs across the nation are responsible for submitting to the NSGL three copies of every publication (excluding proposals) produced entirely or partially with Sea Grant funds.

During the past two years the NSGL experienced considerable growth (21%) in its collection size and 6,129 new Sea Grant documents (3 copies of each title) were processed. At the end of 2002 the Sea Grant collection totaled 87,990 (29,330 archive and 43,995 circulating copies). The majority of the collection is comprised of journal reprints (47%), technical reports (12%), and advisory reports (11%). Proceedings, books, newsletters, handbooks and other miscellaneous reports make up the remainder of the collection.

The digital collection has grown as well and now includes approximately 12,000 electronic documents. During the past two years 2,517 documents were added to the digital collection. These documents can be downloaded from the NSGL website during a database search.

### **Collection Digitization**

Funding for the digitization project (under the auspices of the URI Coastal Data and Information Center, CDIC) ended in August 2000, after making 9,324 electronic documents accessible through the NSGL website. This NOAA-funded initiative achieved its goal of digitizing the majority of the existing Sea Grant collection (with the exception of journal reprints and commercially produced items) and providing full-text PDF versions of the documents over the web.

Even though funding for the CDIC project had ended, the NSGL managed to complete Phase II of the project during this grant period. This phase entailed digitizing the remainder of the collection, seeking permission for some of the commercially copyrighted documents, and splitting large PDF files into smaller, more manageable sections. Although Sea Grant did not directly fund the initial project, the NSGL

recognized the significance of continuing this initiative and was able to do so with the assistance of the newly funded outreach coordinator. This staff member also helped coordinate the digitization of incoming documents and the receipt of existing electronic documents from programs. To expedite the electronic conversion of many new documents, the NSGL has asked Sea Grant programs to send a disk or an attachment of the original file used to produce the document (or of a PDF or other electronic version) when possible, with every new title sent. From these files the NSGL can easily create a digital version of the document that is then linked to the Sea Grant database. There are many advantages to producing the digital versions in this manner including: reduction in staff time required for scanning; PDF documents can often be created in color with original quality; and the file size is greatly reduced, requiring less space on the NSGL server and faster download times. Although this request has been published in the distribution guidelines and reminders have periodically been sent to those in charge of publication distribution, this request has only met with occasional success. Therefore staff continued to scan material not accompanied by a disk or electronic file. Current material must be accompanied by the Publication Transmittal Form (Appendix A). This form was revised during the last grant period to include sections for digitizing approval and to indicate the electronic status of each item.

The digitization project has allowed the NSGL to provide another means of accessing Sea Grant literature. Approximately 16,000 Sea Grant documents are currently downloaded each month. Many have, and will continue to benefit from this service, especially those patrons and researchers in schools, local government and foreign countries that often have difficulty obtaining scientific and technical literature.

### **User Services**

The NSGL provides access to the vast amount of information contained in the collection through (1) the web-searchable database that provides citations, abstracts, and links to digital copies of many documents; (2) the internal publications database; (3) *Sea Grant Abstracts*, which announces the availability of current documents; and (4) commercial databases such as ASFA and NISC.

During the 2001-2002 period, the NSGL responded to 2,486 requests from a diversified spectrum of patrons. Of this total, 1,270 were for loans, 109 were for online literature searches, and the remainder was for *Sea Grant Abstracts*, reference and miscellaneous categories of information. A breakdown of the NSGL patrons served during this two year span indicates that 15% were from governmental agencies on the local, state and federal levels; 12% were from private industry; 30% were from academic institutions; 9% were from the general public; and 25% were from other Sea Grant programs (see Appendices B, C, and D for request statistics). The staff-assisted usage statistics are down, which is understandable due to the NSGL's expanding web presence where many users prefer to compile their own searches and obtain full-text reports online.

The searchable website has been enthusiastically received and 84,103 searches of the NSGL database were performed during the past two years. In addition, 210,587 PDF

documents have been downloaded from the NSGL website during this same period. This represents an astounding 565% increase over the 1999/2000 PDF usage (see Appendix E for PDF download totals by month). Appendix F includes examples of patron comments on NSGL services in general.

### **Database Management**

The NSGL maintains the bibliographic database, representing the only complete index of documents produced with Sea Grant funds. No other scientific or national library database indexes, abstracts, and identifies Sea Grant material more comprehensively. Upgrades are continually being made to the existing computer equipment to maintain current versions of software, add database storage space, and comply with hardware evolutions. A total of 2,043 database entries were added during this grant period, bringing the total number of records in the database to 36,350. These entries include full bibliographic citations, and abstracts and URLs (to electronic versions) when available. The database can be searched in-house using Personal Librarian software and from remote locations via the NSGL website using Z39.50 software that was modified by our computer specialist to work with our existing system.

### **NSGL Website**

The NSGL website (Appendix G) was first introduced in 1996 and its use continues to increase. The primary feature of the site is a searchable database containing citations for all Sea Grant publications, and in many cases, links to full-text electronic versions. This system was designed to be efficient, user friendly and compatible with our pre-existing database. By utilizing a simple search form, one can use a variety of search strategies to identify Sea Grant publications, retrieve abstracts and obtain documents via loan or purchase. During the last two years there was an increase of 90% in search usage and now almost 4,000 searches are performed monthly by visitors to the website. The digital document service that NSGL provides allows users to link to full-text images of many of the documents right from the search results page (see Appendix H).

The NSGL website has several other services that aid Sea Grant programs and other patrons including: a list of recent Sea Grant acquisitions (updated weekly); links to all individual and national Sea Grant programs' websites; and information on how to purchase or borrow Sea Grant documents. A new page, "Ask a Librarian" was added to the NSGL website in 2001. This page provides answers to some of the interesting questions that the NSGL has encountered. Brief answers are provided along with links to digital documents on the topic. The online patron is encouraged to continue their research by reading the full reports cited and by searching the NSGL database to find additional information on the topic. For information on topics not covered in this section, the patron can use the email button provided to contact NSGL staff directly.

Many agencies, organizations and individuals have found the NSGL site to be a useful resource and have provided direct links from their web pages to the site. A sample search

recently conducted from one of the major search engines identified 1,250 libraries, schools, universities, and other agencies that link to the NSGL site.

### **Updated Digital Libraries**

The NSGL updated its series of digital libraries, which are based on current Sea Grant initiatives. Each of these libraries features a list of subject-related titles that are linked to the full-text, digital document. These are available from the NSGL website and provide quick access to Sea Grant documents related to these current issues. To date, libraries on HACCP, Coastal Hazards, Marine Careers/Curriculum, Harmful Algal Blooms, Diving Safety, and Environmentally Friendly Aquaculture have been completed and recently updated. While links to documents contained in these digital libraries are also provided through the NSGL database, these libraries offer patrons the added flexibility of browsing a list of related titles without requiring a familiarity with the vocabulary (see Appendix I for sample library).

### **Outreach**

A part-time position (Outreach Coordinator) was established during the second half of this grant period. In addition to coordinating enhanced outreach efforts this staff member was also responsible for ensuring that digitized publications are widely accessible. The Outreach Coordinator was involved in several projects designed to increase visibility and further promote NSGL services. The coordinator collaborated with a designer to produce a colorful bookmark (Appendix J) directing patrons to the NSGL website. This bookmark was designed to appeal to all audiences and was distributed at several conferences. The coordinator was also responsible for the organization of informational packets that were distributed to marine science teachers and school librarians who can assist by directing students to our website for marine and coastal information. Email marketing was also continued and requests were made to various webmasters of environmental and marine-related websites for potential links to the NSGL website. NSGL staff also exhibited and/or displayed promotional materials at the following environmental, educational and library events:

Sea Grant Week  
(Hilton Head, SC, March 2001)

IAMSLIC Conference  
(Brest, France, October 2001)

National Marine Educator's Conference  
(New London, CT, July 2002)

Naval War College Volcanology Lecture  
(Newport, RI, August 2002)

URI's Bay Blast  
(Narragansett, RI October 2002)

Northeast Aquaculture Expo  
(Warwick, RI, November 2002)

Participating at these events not only helps promote the services of the NSGL, but also helps educate others about Sea Grant in general.

### **ASFA**

ASFA is the premier marine and aquatic sciences indexing and abstracting database. It is produced through the cooperative efforts of several United Nations (including the Food and Agriculture Organization--FAO), international, national, and publishing (Cambridge Scientific Abstracts) partners.

For the past few years the NSGL bibliographic data files have been directly entered into the ASFA database on a monthly basis. This arrangement assures comprehensive coverage of Sea Grant documents in ASFA (something lacking in the past) and also eliminates a step in the distribution process for all programs. An added benefit is that Sea Grant affiliation is now clearly identified in each record under the corporate author field (see Appendix K for sample ASFA record). Links to the NSGL website and the ordering address page are now included in the ASFA record as well. During 2001 the NSGL worked with ASFA to create links directly from Sea Grant report citations in their database to the digitized versions of these reports on the NSGL server. This new service will contribute significantly in enhancing worldwide accessibility to Sea Grant literature.

### **NSGO Network-wide Information System**

The NSGL was involved in discussions with IT Vineyard, the firm hired to study NSGO's database architecture and site navigation in preparation for the development of the network-wide web based information system. This system will be capable of cataloging and tracking technical information, accomplishments and general information. Plans were discussed to include a search system capable of seamlessly searching the NSGL database.

### **Tsunami Information Center**

The NSGL was asked to be a partner site for a tsunami digital library proposed by Oregon State University. This project proposes to bring together various existing digital resources on the subject. The Sea Grant Library contains several articles on this topic and participating in this endeavor will provide greater exposure for Sea Grant documents to an international audience.

### **Coral Reef Bibliography**

Toward the end of 2002, the NSGL received funding to update the Coral Reef Bibliography that is currently available from the National Sea Grant College Program (NSGCP) website. The NSGCP has continuously supported coral reef related research since its inception over 30 years ago and in 1996 a comprehensive bibliography of 882 publications resulting from this research was compiled. Because a number of additional reports have been generated since this compilation, the NSGL proposed its update. A total of 350 new titles were identified utilizing a variety of online search methods, such as author, subject and project number searching, and reviewing annual and other reports. This project is scheduled for completion in February 2003.

### **Shadow Waters Metadata Project**

The NSGL was invited to participate in a project proposed by the University of Florida, entitled: *Shadow Waters: the grey literature of the coasts and estuaries of the Southeastern United States*. The purpose of this project is to enhance awareness, access, and utilization of grey literature technical report collections for the benefit of all involved in coastal and estuarine research and management in the Southeastern United States and Caribbean." This NOAA-funded initiative will involve the participation of several partner libraries. In addition to identifying key collections of grey literature, other objectives of this project include: digitizing selected documents related to water features along the Southeast coast of the U.S. and the Caribbean; creating an enhanced metadata repository that can be searched; designing a special Web interface to serve the document records; and creating a map interface to the metadata for geographic based retrieval.

Because the NSGL has already digitized a large portion of its collection, its role during this project will be limited to the creation of metadata records for the titles that have been digitized. Approximately 3,200 digital documents, originating from the Southeastern Sea Grant programs, have been identified in the NSGL collection. The NSGL will use the enhanced Dublin Core (DC) metadata format to help describe the content of these digital resources. To achieve this goal, a programmer will first need to convert existing database records into basic DC metadata. The metadata technician will then further enhance the metadata by adding additional information such as authoritative geographic names. Once created, the technician will submit DC metadata to the Florida Center for Library Automation where the centralized repository will be maintained. The full-text digital Sea Grant documents will remain on and be distributed from the NSGL server.

### **Maritimes Article**

The NSGL contributed an article for the final issue of *Maritimes* (Volume 43, Number 2, Fall 2001), the quarterly bulletin of the University of Rhode Island Marine and Environmental Programs. This issue was devoted to the coastal and marine databases at URI and the Narragansett Bay Campus federal labs. The main objective of this issue was

to emphasize that "database technology will continue to be an integral part of research that can be used to understand our marine and coastal environments" and that database structure and metadata are extremely important to data retrieval.

### **Aquaculture Network**

With approximately 25% of its collection devoted to aquaculture and fisheries, the NSGL continued to be recognized as one of the key sources for aquaculture information on the national level. A cooperative relationship exists between the NSGL, NOAA Central Library, AquaNIC, and the Delaware Aquaculture Resource Center (affiliated with Delaware Sea Grant). This relationship began in 1998 with the formation of the NOAA Network of Aquaculture Information Services (NNAIS). The goal of NNAIS is to provide the best access to aquaculture information and to facilitate the flow of communication within the network. Plans for coordinating access to resources will be developed and joint activities are being pursued.

### **Sea Grant Abstracts**

The NSGL published two volumes of *Sea Grant Abstracts (SGA)* during this period. This free publication is published quarterly by the NSGL and produced by Woods Hole Data Base, Inc. *SGA* reports on the availability of current Sea Grant publications and includes abstracts and ordering information for each publication. Approximately 98% of all material received by the NSGL is included in *SGA*. Documents commonly omitted include annual reports, outdated material and thesis/dissertation abstracts. The NSGL supplies the data input files and preliminary editing for Woods Hole Data Base, Inc. An index to the quarterly appeared in issue 4 and a periodicals directory was included in issue 1 of each volume.

### **Activity Summary Report**

The NSGL began to design a program activity summary report (see Appendix L) that will be distributed to each program on an annual basis. These reports will summarize acquisition totals for each major publication category and will also provide statistics on NSGL loans and PDF downloads for each program. These statistics will be generated from the NSGL server and the automated circulation system and will give each program the opportunity to see how frequently their documents are utilized.

### **NISC**

The NSGL resumed submitting data files to the National Information Services Corp. (NISC), which publishes information products on CD-ROM and other formats. NSGL's monthly input files are now submitted electronically to NISC on a quarterly basis and in return NISC provides accessibility to the NSGL database on another platform with simple, user friendly interfaces with search modes to suit a variety of users (ie. novice,

advanced, expert). The NSGL database is included on the Marine, Oceanographic and Freshwater Resources disk, which represents an exclusive combination of the world's premier bibliographic databases, including Oceanic Abstracts, ASFA, NOAA Library, OCEANIS and the Chesapeake Bay Bibliography.

### **New Acquisitions List**

The "Recent Acquisitions" page of the NSGL website is updated weekly and each month an invitation to review the list was emailed to all communicators, IAMSLIC (International Association of Aquatic and Marine Science Libraries and Information Centers) members and other interested parties. This list has helped bridge the gap between the time a document arrives at the NSGL and when it is available for searching on the updated database. In addition to letting others within Sea Grant know what products are being generated by other programs, these monthly postings are helpful to marine/aquatic librarians in their collection development. And since press runs of many Sea Grant publications are limited, many in the library community find this service beneficial.

### **LSU Search Page**

NSGL staff and its programmer worked together with Louisiana Sea Grant to develop their own unique form (Appendix M) that is capable of searching the NSGL website. This search form functions in the same capacity as the one on the NSGL website, however one of the search term boxes is hidden in the background and utilized to search only LSU documents. This search form was designed to coordinate with the LSU site. The NSGL has also been approached by other programs to possibly design similar forms for them.