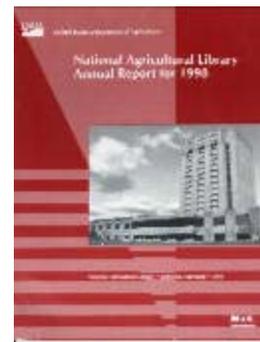


National Agricultural Library Annual Report for 1998

United States Department of Agriculture
National Agricultural Library
Beltsville, Maryland, 1999



U.S. Department of Agriculture, National Agricultural Library. 1998.
National Agricultural Library Annual Report for 1999. Beltsville, MD.

Mention of trade names, commercial products, or companies in this publication is solely for the purpose of providing specific information and does not imply recommendation or endorsement by the U.S. Department of Agriculture over others not mentioned.

While supplies last, single copies of this publication may be obtained at no cost from NAL Publications Office, National Agricultural Library, 10301 Baltimore Ave., Room 204, Beltsville, MD 20705-2351.

Copies of this publication may be purchased from the National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161; telephone 703-605-6000.

The United States Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 14th and Independence Avenue, SW, Washington, DC 20250-9410 or call 202-720-5964 (voice or TDD). USDA is an equal opportunity provider and employer.

National Agricultural Library Cataloging Record

Title: National Agricultural Library. Annual report.

LC card number: 76-648056//r88

ISSN: 0364-7730

NAL call number: aZ733.N3A56

Issued June 1999

Contents

[Director's Message](#)

[General](#)

- [NAL Gives the World Free On-line Access to Database](#)
- [National Microfilm Archive Established](#)
- [NAL Starts Major Renovation](#)
- [NAL, Mexican University Exchange Ag Info](#)
- [Visitors Learn at NAL](#)
- [NAL Hosts South African Flower Exhibit](#)
- [Child Care Publication Developed for White House Conference](#)
- [Environment Improved for Special Collections](#)

- [NAL DC Branch Finishes Busy Year](#)
- [1998 A Banner Year for Outreach](#)
- [Manual for Feeding Marine Mammals Offered](#)
- [On-line Food and Nutrition Discussion Groups Formed](#)
- [Print Collection Shows Modest Growth](#)
- [ISIS Growing](#)
- [NAL Librarian Named ARS Info. Specialist of Year](#)
- [Scientist Videotapes Become Part of Collection](#)
- [Grants Help Colleges Work With NAL](#)
- [Support Continues for Egyptian Agricultural Library](#)
- [NAL Chairs HBCU-Week Celebration](#)
- [TEKTRAN Database Use Blooms](#)
- [Business Resource Guide Published](#)
- [NAL the Site of County Book Fair](#)

Improving Services

- [Electronic Media Center Expanding](#)
- [Electronic Delivery of Documents Expanded](#)
- [Document Delivery Studied](#)
- [Reference Services Reinvented](#)
- [Database Pilot Project Shows Good Results](#)
- [Serials Access Streamlined](#)
- [Self-paced Tutorial in Place for Plant Genome Database](#)
- [Timely Environmental News Available](#)

Electronic Resources

- [AgNIC Continues To Grow](#)
- [Brittle Books Preserved Digitally; Comprehensive Plan Drafted](#)
- [Regional Preservation Committee Established](#)
- [Electronic Preservation Plans Being Developed](#)
- [Retrospective Conversion of Monographs Completed](#)
- [Project Digitizes Research Info](#)
- [Staff Lauded for Electronic Publishing Article](#)

Responding to Agricultural Concerns

- [Funds Received for Food Safety](#)
- [Dietary Supplement Needs Assessment Conducted](#)
- [Women in Agriculture Bibliography Produced](#)
- [Guide Leads to Improved Animal Welfare](#)
- [Bibliographies on African-American Subjects Prepared](#)
- [Screwworm Eradication Collection Developed](#)
- [Food Irradiation Info. Available on NAL Website](#)
- [National Rivers Initiative Supported](#)
- ["Zoonoses" Covered in New Publication](#)
- [Foodborne Illness Site Maintained](#)
- [Library Helps in New Dietary Guidelines Development](#)

- [Heirloom Seeds Identified](#)
- [Technology Transfer Process Effective](#)
- [Publication Gets Blue Ribbon](#)
- [Cover Crops Publication in Demand](#)

Tables

- [Table 1. Growth of NAL Collections](#)
- [Table 2. Technical Services Activities](#)
- [Table 3. Information Services Activities](#)
- [Table 4. Information Systems Activities](#)

[NAL Electronic Addresses](#)

Director's Message



"Renovation": a word that can strike terror in the hearts of librarians. How do we upgrade and update our facilities tearing down walls, moving collections, installing new electronic systems--while still providing top-rate service to our customers?

This is the challenge that NAL is currently facing. A severe shortage of storage space for the collection, a need for even more customer-friendly user areas, a wish to upgrade the building infrastructure, and a desire to meet the new millennium with the most modern facilities we can develop has led NAL to undertake a major renovation of its building in 1998. That the renovation has caused disruptions and some consternation with customers and staff may be an understatement. But we are trying to focus on the end goal--a more effective and thoroughly updated facility for customers and staff alike as the millennium dawns.

NAL has been at its current location, an impressive 14-story brown brick building in Beltsville, Maryland, since 1967. That year we moved to the new building on the grounds of USDA's Beltsville Agricultural Research Center from our cramped and outdated facilities at USDA's headquarters in Washington, DC. We had been in Washington since we were established by Abraham Lincoln in 1862.

When we moved into the new Beltsville building, we had the finest services and library facilities available at the time. But that was more than 30 years ago, and as we all know, the library profession and the information management business have taken great leaps since then. Through the years, NAL has made every effort to include new library and information technologies and innovations while still maintaining the pleasant and attractive original design. But it became obvious that major upgrades to the infrastructure of the building were needed. After careful planning and thousands of meetings with architects, staff, designers, contractors, and other large libraries that have gone through major renovation projects, NAL started renovating in 1998.

NAL Deputy Director Keith Russell is managing the renovation project, assisted by a renovation team of NAL staff. Keith and his team seem to have to deal with a renovation crisis each day. But his calm efficiency, supported by the can-do spirit of the team, are keeping things on schedule and moving ahead.

It has been hectic. But we are persevering, focusing on providing our customers with the same level of assistance and quality services that they have come to expect from NAL. Thanks to the outstanding effort and adaptability of all of the NAL staff and the understanding and good humor of our customers, we are succeeding. But I'll be honest, the completion of the renovation can't come soon enough for all of us.

In the meantime, and through all of the commotion, NAL continues to lead the world in managing, preserving, and making accessible agricultural information that is critical to the well-being of the nation and the world. The activities listed in this year's annual report testify to that.

Pamela Q.J. André



General

NAL Gives the World Free On-line Access to Database



NAL Staffer Deborah Richardson (seated) demonstrates AGRICOLA on the Internet to the foreign press. (Click photo to enlarge.)

In September 1998, NAL gave the world free on-line access to AGRICOLA, the library's database of more than 3.5 million records of agricultural information. This was a major step toward NAL's goal of becoming a "library without walls," of using the burgeoning electronic information technology to make NAL's collection and expertise as widely available throughout the world as possible.

AGRICOLA--AGRICultural OnLine Access--is the backbone of the National Agricultural Library, providing access to materials in NAL's collection and at library collections throughout the country. Previously, it was available only at the library and through commercial sources by subscription. By putting AGRICOLA on the World Wide Web, NAL made agricultural information more accessible to people in the United States and all over the world without the need to visit NAL in person. The AGRICOLA web site is www.nal.usda.gov/ag98.

Input to AGRICOLA continued to grow during 1998. A total of 87,989 indexing and cataloging records were added to the database, a 9-percent increase over the 1997 total. AGRICOLA indexing records are enhanced to varying degrees. Some articles are fully enhanced with in-depth subject analysis and an abstract. More than 37 percent of the indexing records added to the database this year include abstracts.

Cataloging productivity went up as well. NAL created nearly 1,000 more cataloging records in 1998--a total of 16,693 records--than in 1997.



NAL Director Pamela Andre speaks to a TV reporter about NAL electronic information management. (Click photo to enlarge.)

National Microfilm Archive Established

NAL was named as the national preservation depository and manager for archival microfilm of important state and local agricultural literature identified by the U.S. Agricultural Information Network. Subsequently, NAL began receiving archival microfilm for cataloging and storage in an environmentally controlled space.

Late in 1998, NAL completed phase one of a project to move all NAL master negative microfilm to offsite storage. The storage is in Boyers, Pennsylvania, and is with the company National Underground Storage, Inc. (NUS). NUS constructed a vault for NAL that meets preservation-level environmental standards for long-term storage of microfilm. NAL staff inventoried, bar-coded, and packed nearly 3,300 reels of master negative microfilm for transfer to the facility. Phase two of the project will take place in 1999.

NAL Starts Major Renovation



A helicopter prepares to hoist part of a new cooling system to NAL's roof. (Click photo to enlarge.)



NAL Staff, engineers, and architects plan for the 3-year renovation of the NAL building. (Click photo to enlarge.)

NAL began a major renovation of its building in 1998. NAL undertook the renovation because of a severe shortage of storage space for the collection, a need for even more customer-friendly areas for users, and the need to upgrade the 30-year-old building's infrastructure. Construction caused NAL temporarily to move some services and close some areas of the building. These disruptions will continue throughout the renovation, expected to take up to 3 years. While creating a somewhat hectic environment for customers and

staff, the library is focusing on providing the same level of assistance and quality services that it has always given.

NAL, Mexican University Exchange Ag. Info.

NAL signed an agreement with the Biblioteca Central Magna (BCM) of the Autonomous University of Nuevo Leon (UANL), Mexico, to cooperate in enhancing access to agricultural and related information. The signing ceremony took place at UANL in Monterrey, Mexico, on October 29, 1998. Speaking at the ceremony, Dr. Floyd Horn, administrator of USDA's Agricultural Research Service (ARS), praised the agreement and the history of agricultural cooperation between Mexico and the United States. ARS is NAL's parent agency.

Since 1996, NAL and BCM have been exchanging agricultural materials on an informal basis, as well as working together to improve library services for their respective users. The signing of the agreement formalized this arrangement.

The agreement calls for the two libraries to provide training for each other's staffs, continue exchanging information, help one another in the critical area of library material preservation, and work together in developing information products, such as CD-ROMs and bibliographies. The agreement also calls for UANL to facilitate the participation of other Mexican universities and libraries in the Agricultural Network Information Center (AgNIC) of the United States. AgNIC, which is being developed by NAL and U.S. land-grant universities, is a system that provides Internet access to agriculture-related information, agriculture experts, and other resources.

Visitors Learn at NAL



NAL Director Pamela Andre (left) greets members of the Future Farmers of America. (Click photo to enlarge.)

NAL's visiting scholar, visiting librarian, and short-term internship programs provided in-depth coverage of NAL programs for participants throughout the world in 1998. NAL hosted visiting scholars and guests from India, China, Puerto Rico, the Omaha Tribal Library, the Nebraska Indian Community College, historically black colleges and universities, and more.



NAL hosted hundreds of groups in 1998. (Click photo to enlarge.)

In a milestone for NAL, the library hosted its first tribal college library director, providing detailed orientations on NAL programs, products, and services and on resources available from state land-grant

colleges and universities. In 1994, the President proclaimed that the 29 tribal colleges in the United States were members of the state land-grant system.

One-day NAL tours were provided to over 500 visitors, including groups from Brazil, China, Egypt, Mali, Mexico, Pakistan, Puerto Rico, South Africa, South Korea, Spain, Sweden, and Turkey.

NAL Hosts South African Flower Exhibit



South African flowers on display in the NAL lobby. (Click photo to enlarge.)

NAL hosted a free public exhibit on South African indigenous flowers, organized by the Embassy of South Africa and the U.S. National Arboretum, in its lobby in March 1998. Called "Of Flowers, Folios, and Farmers--in Celebration of the Floral Gems, Blossoming Wealth of South Africa," the exhibit focused on South Africa's burgeoning flower industry and featured dried South African flower arrangements and visual displays highlighting the research of the Agricultural Research Council (ARC) of South Africa.



Displays from the "Flowers of South Africa" exhibit at NAL. (Click photo to enlarge.)

To complement the floral and informational exhibit, rare books from the NAL Special Collections, illustrating and describing native South African plants, were also on display. Featured was Arabella E. Roupell's 1849 book *Specimens of the Flora of South Africa by a Lady*.



Marianna Purnell, agricultural-scientific counsellor of the South African Embassy, thanks NAL for helping arrange the national exhibit of South African flowers.. (Click photo to enlarge.)

The exhibit sought to show how the ARC is working with previously disadvantaged South African farmers in maximizing the inherent economic potential of the nation's indigenous floral diversity. Agricultural science and rural development in South Africa are guiding this novel approach to conservation, sustainable use, and community-based management of natural resources.

Child Care Publication Developed for White House Conference

NAL's Food and Nutrition Information Center (FNIC) and USDA's Food and Nutrition Service jointly developed a publication on child care resources that was used by the participants of the White House Conference on Child Care, held in October 1998. The publication is entitled *Food and Nutrition Resource List for Child Care and Preschool Staff*.

Environment Improved for Special Collections

NAL completed rehousing all but two of its manuscript collections. With detailed labeling and accession forms completed, NAL's Special Collections Section (SCS) greatly improved access to and conservation of these materials. Most of the NAL shelving used for manuscript storage and access was replaced with environmentally controlled storage. In preparation for the renovation, SCS relocated 3,000 NAL rare books to secured areas with controlled light, temperature, and humidity.

NAL DC Branch Finishes Busy Year

In 1998, NAL's Washington, DC, Reference Center, located at USDA headquarters, completed another active year, serving over 24,000 walk-in customers, answering over 5,000 reference questions, supplying customers with over 50,000 federal and state tax forms, and providing information to customers on nearly 1,000 U.S. companies. Staff from the center served as members of the Global Change Education and Outreach Working Group, the USDA American Indian Council, and the Federal Library and Information Center Committee.

1998 A Banner Year for Outreach

NAL's outreach program introduced thousands of people to NAL products and services in 1998. These people included high school students, research scientists from throughout the world, economists, educators, librarians, the general public, and members of Congress and their staffs. Over 6,000 people visited NAL exhibit booths at the Future Farmers of America conference, the National Science Teachers Association annual meeting, the national meeting of Minorities in Science and Technology, and dozens of other national conferences.

Manual for Feeding Marine Mammals Offered

NAL's Animal Welfare Information Center (AWIC), together with USDA's Animal and Plant Health Inspection Service, put together a manual of procedures for handling the food fed to many of the marine mammals seen in zoos and aquariums. The manual, entitled *Handling Fish Fed to Fish-Eating Animals*, discusses all points of handling the food-fish, from ordering, purchasing, and receipt to storage, thawing, and feeding. Using the guidelines contained in the manual allows institutions that care for fish-eating animals to meet or exceed all regulations that cover their feeding. The manual was prepared by the director of nutrition services for the Daniel F. and Ada Rice Center, Chicago Zoological Society, with assistance from AWIC staff.

On-line Food and Nutrition Discussion Groups Formed

NAL's Food and Nutrition Information Center (FNIC) worked to establish two new on-line discussion groups on food and nutrition. A group on child- and adult-care food programs was launched on the web in August 1998. It enables personnel working in USDA's Child and Adult Care Food Programs (CACFP) to exchange information and ideas. The group is called *cacfp_talk*.

Also formed in 1998 was the discussion group *Reviwrtalk*. It provides an avenue for food and nutrition professionals to discuss the findings and issues that arise when conducting nutrition reviews and when providing technical support to U.S. schools in the National School Lunch and Breakfast Programs.

Print Collection Shows Modest Growth

The NAL collection of print volumes continued to show a diminished rate of growth, evident over the last 5 years. The drop in the 1998 rate is partially attributable to the flat budget for library materials, the loss of staff positions in technical processing, and NAL's transition to an electronic library. In addition, several projects in 1998 resulted in more withdrawals of print volumes than in other recent years. Budget constraints led to cancellation of a number of paid subscriptions to serials that were marginal in scope, and after review, NAL also withdrew its entire run of the retrospective holdings. In preparation for the renovation of public space on NAL's first floor, staff reviewed titles housed in the public reading room prior to moving the materials to temporary space and recommended several cancellations and withdrawals. To recover shelving space, collection management staff also removed multiple copies of monograph titles where extra copies were not needed.

ISIS Growing

In 1998, ISIS, NAL's integrated library system, grew to include over 1,250,000 bibliographic citations, nearly 600,000 of which are in ISIS's Journal Article Citation database. The remainder of the citations are in the ISIS Online Catalog. ISIS includes machine-readable citations from NAL, the U.S. National Arboretum, and regional libraries of USDA's Agricultural Research Service. ISIS can be accessed at <http://www.nal.usda.gov/isis>.

NAL Librarian Named ARS Info. Specialist of Year



Shirley Edwards, NAL chief of indexing, was named "Librarian of the Year" by USDA's Agricultural Research Service. (Click photo to enlarge.)

To complement the floral and informational exhibit, rare books from the NAL Special Collections, illustrating and describing native South African plants, were also on display. Featured was Arabella E. Roupell's 1849 book *Specimens of the Flora of South Africa by a Lady*.

NAL librarian Shirley Edwards won the award as Librarian/Information Specialist of the Year from USDA's Agricultural Research Service. Edwards was cited for her continual efforts at improving AGRICOLA, NAL's bibliographic database. She has over 35 years of NAL service and is currently the chief of NAL's Indexing Branch.

Scientist Videotapes Become Part of Collection

Dr. Hank Beachell, winner of the World Food Prize and other prestigious awards, was the latest research scientist to be interviewed on videotape for inclusion in the NAL collection. NAL is preparing the interview for web-delivery as well as archival storage. The "oral history" covers field notes and other significant information not normally captured in press reports of famous research scientists. For nearly 20 years, NAL has been videotaping interviews of noted scientists for inclusion in its collection.

Grants Help Colleges Work With NAL

NAL is working with Prairie View A&M University, Texas, in creating learning modules to incorporate the concepts of biotechnology throughout the university's curricula. This is being funded through a USDA grant. Another USDA grant will allow Fort Valley State College, Georgia, to work with NAL in "experimental learning in biotechnology."

Support Continues for Egyptian Agricultural Library



Members of the Egyptian National Agricultural Library (ENAL) continue their work with NAL in establishing ENAL in Cairo. (Click photo to enlarge.)

NAL staff members were sent to the Egyptian National Agricultural Library (ENAL) in Cairo in 1998 to provide training in advanced reference services for ENAL staff. Since 1987, NAL has been assisting the Government of Egypt in establishing ENAL. The 1998 training covered serving customers and users, evaluating the reference collection, making recommendations to enhance holdings, sharpening bibliographic skills, utilizing web sites, developing bibliographic products, and promoting ENAL services. Recommendations were developed by ENAL staff and NAL trainers to plan for improvements in ENAL reference services. They include erecting better signage in ENAL, combining parts of the microfiche and periodicals divisions, relocating the information/service desk, and training customers in more self-service.

The Joint NAL/ENAL Committee on Cooperation met at NAL during the summer of 1998.

NAL Chairs HBCU-Week Celebration

An NAL manager was selected to chair the planning and celebration of National Historically Black Colleges and Universities (HBCU) Week at USDA. Working closely with the White House HBCU Initiative and USDA's Education Coordinating Council, the NAL manager designed, scheduled, and conducted a series of events that generated wide participation in the celebration within USDA and other federal agencies.

The in-house activity for USDA employees involved an opening ceremony and exhibits at USDA headquarters for the 1890 universities. In addition, 1890 scholars had an opportunity to meet with subcabinet officials to learn about future trends and opportunities in agriculture. Fourteen colleges participated. The theme of the celebration was "Building Upon the Past To Create the Future." The purpose of the activities was to showcase the work of the scholars who benefit from funds allocated to HBCU. USDA Secretary Dan Glickman and NAL Director Pam André spoke at the opening program for the week-long celebration.

TEKTRAN Database Use Blooms

NAL's Technology Transfer Information Center (TTIC) reported heavy use of TEKTRAN (Technology Transfer Automated Retrieval System), a database of interpretive summaries of ARS research-related articles. TEKTRAN allows researchers, industry, and the general public to read about recent ARS research on food and nutrition, crops and livestock, natural resources, and industrial products and technology. TTIC, working with the ARS Office of Technology Transfer, aided in the design, programming, implementation, and ongoing support of TEKTRAN on the Internet. An average of 100 information requests are received from TEKTRAN searchers each month. TEKTRAN is on the Internet at <http://www.ars.usda.gov/services/TekTran.htm>.

Business Resource Guide Published

NAL's Technology Transfer Technology Center (TTIC) developed an electronic publication, *Business Incubators Resource Guide*, to aid new businesses. Business incubators are public or private centers where business owners or inventors can obtain business information and advice, help in locating financing and permanent facilities, and technical assistance. A directory of business incubators and related organizations, publications for inventors or new business owners, and a bibliography on business incubators are included. The guide is available at <http://www.nal.usda.gov/ttic/incubator/businc.htm>.

NAL the Site of County Book Fair

The NAL grounds in Beltsville, Maryland, were the site of "Book Fest 97," the Prince George's County, Maryland, book festival. Book Fest 97 was a community-wide literary festival that "celebrates and promotes the fun and benefits of reading." The fest featured authors, poets, and interactive literary exhibits for families.

Arts and crafts, food vendors, storytellers, clowns, and other live entertainment were also part of the program. The event was sponsored by the Prince George's County Government, the Prince George's County Memorial Library System, the Community Services Coalition, the Journal (MD) Newspapers, and local businesses.

Improving Services

Electronic Media Center Expanding

NAL added a significant core of current scientific literature to the resources available in its Electronic Media Center. Over 170 journals in agricultural, biological, and social sciences published by Academic Press are available on-line at NAL with web-based access to the International Digital Electronic Access Library (IDEAL). Through its license agreement with Academic Press, NAL offers electronic access to the full contents of journals in the IDEAL package, starting with 1996 issues. NAL's license authorizes access to on-site users in the library as well as USDA employees in the Washington, DC, area.

NAL phased in its Electronic Media Center (EMC) so that library users can gather information from NAL's electronic resources. EMC has seven customer-dedicated computers and network printers. NAL customers can now access 30 databases, seven CD-ROMs, general Internet-based services, electronic federal depository collections, 45 electronic scientific journals, and a selection of electronic newspapers.

Electronic Delivery of Documents Expanded

NAL continued to encourage its patrons to send requests and receive materials electronically. Part of this effort included providing complimentary copies of Ariel software, with technical support, to over 20 USDA regional offices and to the libraries of Historically Black Colleges and Universities and Tuskegee University. Through Ariel, documents can be sent directly to a user's workstation anywhere in the world in less than a minute.

Electronically submitted requests were the primary type of document delivery requests NAL received in 1998, accounting for 80 percent of all such requests (excluding on-site requests). Electronic delivery of materials to patrons increased 60 percent over 1997, and represented 34 percent of all deliveries.

Document Delivery Studied

NAL began a project to collate usage data based on document delivery requests for 1997-98. NAL is creating a database encompassing both bibliographic and patron details for each request. The completed database will allow the library to target the needs of NAL users and assess the development of the NAL collection. About 31,000 requests filled from the NAL collection, 4,000 returned and rejected requests, and 4,000 requests filled by borrowing will be keyed into the database. The completed database will allow NAL to generate a variety of reports, including how frequently various parts of the collection are used, what types of patrons are using the collection, and what kinds of materials are borrowed because they are not available in the NAL collection.

Reference Services Reinvented

NAL's Public Services Division launched a major initiative to create a new reference service model that capitalizes on the use of web-based services and realigns staff and budget with customer demand. The data-gathering phase of this effort resulted in reports that investigated new models and roles for library staff and identified components to include in a new model, developed a statistical profile of current reference services and users, and analyzed the library's workload and made recommendations for selected workflow

analyses. The next stage of the effort will be creating the new model for implementation in FY 1999.

Database Pilot Project Shows Good Results

NAL's FirstSearch Pilot Project on OCLC's FirstSearch on-line bibliographies and full-text databases was concluded. NAL then surveyed participants in the project and found that a large majority liked the 24-hour, 7-day accessibility to selected databases that the project allowed. NAL subsequently made four FirstSearch databases available on on-site workstations at the library. These included *H.W. Wilson Select*, *Library Literature*, *Reader's Guide Abstracts*, and *World Book Encyclopedia*. Since NAL is paying on a per-use basis rather than maintaining a full subscription to these tools, costs have been substantially reduced.

Serials Access Streamlined

Efforts to improve access to periodicals began with activities designed to expedite the creation of bibliographic records for serials. All serials awaiting catalog processing were reviewed and assigned new priorities. Titles that were not a priority for the immediate cataloging were assigned call numbers and sent to the collection where they can be accessed by provisional bibliographic records in the on-line catalog. Priority titles were expedited through cataloging and review. New throughput goals were established to reduce the number of days needed to process new serial titles, from receipt to release, to the collection. During the first months of tracking serials processing under the new system, over 90 percent of the new titles were completed on time. The Technical Services Division will focus on similar improvements for monograph processing in 1999.

Self-paced Tutorial in Place for Plant Genome Database

NAL prepared a self-paced, on-line tutorial to help users of NAL's Plant Genome Database learn how to get the most out of their searches. The tutorial went live on the web in June 1998. It was used to teach courses in agronomy at major universities and is one of the most highly used resources on NAL's Plant Genome website.

Timely Environmental News Available

NAL's Water Quality Information Center continued to manage the popular Internet mailing list *Enviro-News*, which provides timely environmental news to more than 450 subscribers. Subscribers receive notices of upcoming conferences and seminars, requests for proposals, calls for papers, announcements of funding and employment opportunities, and information about new web services.

Electronic Resources

AgNIC Continues To Grow

Representatives from U.S. and Canadian universities and agricultural organizations met at NAL to decide on the next steps in developing AgNIC, the Agricultural Network Information Center, on the World Wide Web. AgNIC links worldwide agricultural information networks, providing one-stop shopping to anyone searching the web for agricultural information. It can be accessed at <http://www.agnic.org>. At the meeting, AgNIC members developed governing rules, elected an executive board, and established the AgNIC Alliance Coordinating Committee. Also discussed were ways to expand AgNIC coverage and ways to attract new members to the AgNIC alliance.

Brittle Books Preserved Digitally; Comprehensive Plan Drafted

NAL established procedures for digital conversion of USDA embrittled-paper publications. The library has converted collections of USDA paper publications to preservation-quality digital format. More than 24,000 pages were converted, becoming the first publications in NAL's digital archive collection. NAL is putting these images on the World Wide Web.

NAL has written a draft NAL Preservation Roll-out Plan, including program budget and organization. The plan will assist the library in shaping an effective preservation program that will produce significant long-term benefits for the survival of NAL's permanent research collections. The plan outlines the program's mission, development, and functions. It details actions and identifies resources necessary to advance the preservation program, including staff, funding, space, and equipment.

Regional Preservation Committee Established

NAL is a founding member of CIRLAP, a regional preservation committee composed of Georgetown University, Howard University, Johns Hopkins University, the Library of Congress, NAL, Smithsonian Libraries, the University of Delaware, and the University of Maryland. Preservation representatives from each institution explore collaborative programs and services, exchange information, and investigate cooperative initiatives to enhance the preservation programs of the institutions.

Electronic Preservation Plans Being Developed

Meeting with key stakeholders, NAL took the lead in developing plans to preserve USDA electronic publications. Preservation and long-term access of these publications became an important issue due to the ephemeral nature of electronic formats.

Retrospective Conversion of Monographs Completed

A milestone was reached in NAL's efforts to convert to an electronic library with the completion of a 5-year project to create machine-readable and -searchable catalog records for all monographs in its collection. Previously, the paper-based catalog card records were only available to on-site NAL users. When these records are loaded to AGRICOLA, NAL's on-line bibliographic database, information about the availability of an additional 188,000 resources in the national collection will be accessible to remote users. Many of the records converted describe historically important agricultural books, reports, and other published resources that are held only in NAL's collection.

Until the retrospective serials' cataloging records are converted and available on-line, NAL will retain the pre-1965 card catalog.

Project Digitizes Research Info.

Annual reports and conference proceedings of the Bean Improvement Cooperative (BIC) are undergoing digital conversion at NAL. The conversion represents the first major full-text items in the NAL digital collection that will be extensively marked up using SGML (Standard Generalized Mark-Up Language). SGML is the standard selected by NAL for future document management and is a tool that will provide greater user access to information while preserving continued access through time, independent of software and hardware. The BIC materials cover the period 1957-1997 and amount to over 5,000 pages of text. In early 1998, NAL made a presentation on this project at the BIC biennial conference in Annapolis, Maryland.

Staff Lauded for Electronic Publishing Article

NAL staff who work in electronic publishing cooperated in writing a well-received article for the peer-reviewed *Journal of Applied Communication* in 1998. The article, "An Overview of Electronic Publishing and Extensible Markup Language (XML)," discusses the emergence and growth of electronic publishing and briefly describes XML, a new technology useful for producing and managing digital documents.

Responding to Agricultural Concerns

Funds Received for Food Safety

The U.S. Department of Education awarded NAL's Food and Nutrition Information Center a \$5,000 planning award to develop an interactive Internet site on food safety issues for high school students and teachers. The site is also available to others. The module demonstrates food safety principles for daily living and incorporates foreign language teaching materials. The site was developed in partnership with teachers from the Maryland school systems and representatives from various civic groups.

Dietary Supplement Needs Assessment Conducted

NAL's Food and Nutrition Information Center and the National Institutes of Health assessed the national need for information on dietary supplements. Surveys were mailed to nearly 200 major nutrition, health, and medical organizations in the United States. The survey sought to gather information on the availability of, and need for, dietary supplements information resources. When compiled, the results will be used to coordinate existing resources and design new ones.

Women in Agriculture Bibliography Produced

Women's roles in world agriculture and rural life and their contributions worldwide are the subject of a bibliography published by NAL's Alternative Farming Systems Information Center (AFSIC). Compiled by USDA's Economic Research Service and AFSIC, *Women in Agriculture and Rural Life: An International Bibliography* (Special Reference Brief 98-02) cites works from AGRICOLA, NAL's bibliographic database, and includes nearly 1,500 articles, books, videotapes, reports, and other materials published from January 1979 to March 1998. AFSIC produced the bibliography to coincide with the Second International Conference on Women in Agriculture, held in Washington, DC, June 28-July 2, 1998.

Guide Leads to Improved Animal Welfare

Information on reducing or eliminating the pain and distress of laboratory animals used in the production of antibodies is contained in a resource guide produced by NAL's Animal Welfare Information Center (AWIC). *Information Resources for Adjuvants and Antibody Production: Comparisons and Alternative Technologies* contains 186 pages of information from journals, websites, researchers, and others on techniques for producing antibodies and adjuvants while seeking to protect the laboratory animals in which these substances are used or produced.

The guide contains articles on alternative methods and separate bibliographies on adjuvants, antibody production, and guidelines/policies. Other sections refer to books and proceedings; institutions providing new technologies; educational websites; and organizations that provide information on adjuvants, antibody production, and alternatives.

Bibliographies on African-American Subjects Prepared

NAL produced free bibliographies of literature on African-American sociology, economics, history, and culture. The bibliographies contain reference information on about 300 articles and reports (most of which are available in the NAL collection) related to African-American life. The bibliographies are titled *African Americans in Agriculture*, *African American Sociology and Economics*, and *African American History and Culture*.

Screwworm Eradication Collection Developed

During 1998, NAL continued its lead role in documenting the history of the eradication of the screwworm parasite around the globe. The success of the international screwworm eradication program stands as a model of the positive power of agricultural research and interagency cooperation. NAL believes that developing and publicizing its "Screwworm Eradication Collection" will prove the value of agricultural research in the United States and the world.

In developing the collection, NAL identified pertinent collections to acquire and key contacts to establish in order to document the dramatic story of the screwworm eradication. The 1960 film "Roundup," about the screwworm problem, was transferred to videotape for improved access and preservation. Products that will result from this effort will include a web page, electronic and print finding aids, oral histories, films, publications, brochures, and exhibits.

Food Irradiation Info. Available on NAL Website

Following the approval by the Food and Drug Administration of the use of food irradiation to control bacteria in red meat, NAL made food irradiation information available on its home page through the Food and Nutrition Information Center's home page at <http://www.nal.usda.gov/fnic/index.html>.

The site has several food irradiation information items. One is the NAL-produced document *Food Irradiation Overview: A Selected Annotated Bibliography*, which contains a list of significant dates in the history of food irradiation and a bibliography of dozens of articles from throughout the world discussing various aspects of the process.

Also at the site, under "Food Irradiation 2 Wholesomeness Collection," are the results of food irradiation studies conducted for the U.S. Army in the 1950s and 1960s. In 1996, NAL produced a CD-ROM containing this information working in conjunction with the Food and Agriculture Organization of the United Nations.

National Rivers Initiative Supported

NAL's Rural Information Center (RIC) provided information services to rural communities participating in the American Heritage Rivers Initiative. The initiative supports efforts by communities along U.S. rivers to spur economic revitalization, protect natural resources and the environment, and preserve the historical and cultural heritages of river communities. The President announced the initiative in the 1997 State of the Union address and later issued an executive order directing federal agencies to establish and implement it. RIC received funding from the Forest Service to provide the information services.

"Zoonoses" Covered in New Publication

Diseases that can be transmitted from animals to humans were the subject of a new reference publication, *Zoonotic Diseases, SRB 97-04*, produced by NAL's Animal Welfare Information Center (AWIC). Called "zoonoses" or "zoonotic diseases," these diseases include rabies, tuberculosis, anthrax, and hantavirus. AWIC developed the publication for researchers because scientists have suggested links between mad-cow disease

and its human equivalent and because of a strain of AIDS recently found in monkeys that is similar to the human strain.

Foodborne Illness Site Maintained

NAL began maintaining the website of the Foodborne Illness Education Information Center of USDA and the Food and Drug Administration. The site features statistics on foodborne illness, government reports, consumer education materials, plans for controlling foodborne illnesses, and a "food safety index" that provides links to other food safety sites. It also features an electronic discussion group.

Library Helps in Development of New Dietary Guidelines

NAL began literature searches for USDA's Center for Nutrition Policy and Promotion, which is developing the *Dietary Guidelines for Americans* for issuance in the year 2000. The literature identified serves as background to research on the new guidelines.

Heirloom Seeds Identified

Increased awareness throughout the agricultural world of the importance of genetic diversity has led to world concern about preserving heirloom seeds--seeds of organisms that have been around for at least 50 years. In response, NAL's Alternative Farming Systems Information Center published a series of widely sought publications: *Vegetables and Fruits: A Guide to Heirloom Varieties and Community-based Stewardship, Volume 1, Annotated Bibliography; Volume 2, Resource Organizations;* and *Volume 3, Historical Supplement.*

Technology Transfer Process Effective

NAL's Technology Transfer Information Center (TTIC) continued to work with the unique technology transfer process developed in its series, *Transferring Technologies for Industry*. The process has proven to be efficient and cost-effective in locating and transferring federally developed technologies to industry. The University of Maryland Technology Extension Service is evaluating the process and six associated projects and will suggest refinements.

TTIC, working with the Federal Laboratory Consortium, will use the process to identify a multisensor system that locates error-producing conditions in utilities. Such a system could improve the safety of utility and construction workers and the general public, while reducing losses associated with power and communication outages.

Publication Gets Blue Ribbon

Watershed Management, a publication written and produced by NAL's Water Quality Information Center, received a Blue Ribbon Award in the 1998 American Society of Agricultural Engineers educational materials competition. The publication provides information to private landowners on managing forests and protecting water quality.

Cover Crops Publication in Demand

More than 5,000 copies of NAL's *Managing Cover Crops Profitably, 2nd edition*, were reprinted and distributed in 1998, in response to large demand for the first edition. The publication was developed by NAL's Alternative Farming Systems Information Center and the Sustainable Agriculture Network, which maintains offices at the center. The publication offers expert advice and management techniques that will

build soil by supplying organic matter from cover crops.

Table 1. Growth of NAL collections

Collection item	1997	1998
Printed items		
Monographs	20,343	22,825
Serial volumes	15,114	13,678
Withdrawn volumes	<u>(2,993)</u>	<u>(11,772)</u>
Net volumes added	32,464	24,731
Nonprinted items		
Microforms	1,061,240	1,068,235
Audio	430	433
Graphic	1,079	1,105
Film and video	3,153	3,410
Electronic information	972	1,316
Maps	1,493	1,607
Total items in collections		
Total print volumes	2,267,793	2,292,524
Total nonprint items	<u>1,068,367</u>	<u>1,076,106</u>
Total collection	3,336,160	3,368,630
Manuscripts (linear feet)	18,382	18,491

Table 2. Technical Services activities

Activity	1997	1998
Articles indexed by		
NAL	70,942	61,647
Other	<u>2,947</u>	<u>12,500</u>
Total	73,889	74,147
Abstracts	25,334	27,898
Titles cataloged by		
NAL	15,778	16,693
Other	<u>920</u>	<u>550</u>
Total	16,698	17,243
Other cataloging activity		
NACO* headings	1,139	1,005
CONSER* records	583	489
BIBCO* records	300	363
Acquisition funds expended		
Serials, including series	\$1,966,459	\$1,941,125
Monographs	<u>287,986</u>	<u>308,617</u>
Total	\$2,254,445	\$2,249,742
Titles sent to cataloging		

Monographs	9,620	8,188
Serials	<u>571</u>	<u>532</u>
Total	10,191	8,720
Serial volumes added	15,114	13,678

*NACO, CONSER, and BIBCO are components of the international Program for Cooperative Cataloging. The statistics for *NACO, CONSER, and BIBCO are NAL's annual contributions of name authority records, serials cataloging, and monograph cataloging, respectively. NACO = National Coordinated Cataloging Operations, CONSER = Cooperative On-Line Serials Program, and BIBCO = the name of a library-services company.

Table 3. Information Services activities

Activity	Number or percentage
Reference requests processed	32,476
Requests received electronically	9,408
Responses delivered electronically	8,323
Document Delivery Requests	
Received	166,666
Filled	143,409
Received electronically	80%
Delivered electronically	34%
Source of Requests	
USDA	59%
Non-USDA	41%
Hits on web sites	
NAL home pages	7,575,401
AgNIC (Agriculture Network Information Center)	2,416,634
AGIS (Agriculture Genome Information System)	1,415,546

Table 4. Information Systems activities

Activity	Number
AGRICOLA	
New records	87,989
Corrected records	435
Deleted records	55
Records to AGRIS*	46,186

***AGRIS is a worldwide bibliographic database maintained by the United Nation's Food and Agriculture Organization.**

NAL Electronic Addresses

Agricultural Network Information Center (being developed by NAL)

Alternative farming systems

Animal welfare information

Availability of specific titles and NAL lending policy

Education Programs Unit, which handles tours and demonstrations of NAL systems

Food and nutrition information

Gift and exchange information

Interlibrary loan or document delivery requests

NAL's branch at USDA headquarters in Washington, DC

News media inquiries on NAL

Reference services

Rural development and rural health information

Special Collections Section, which handles rare books and collections of research materials of noted agriculturalists

Transfer of new agricultural technology from the Federal Government to private enterprise

Water quality information

agnic@agnic.org

nalafsic@nal.usda.gov

awic@nal.usda.gov

circinfo@nal.usda.gov

epu@nal.usda.gov

fnic@nal.usda.gov

giftexch@nal.usda.gov

www.nal.usda.gov/mail/access.html

drcr@nal.usda.gov

paffs@nal.usda.gov

agref@nal.usda.gov

ric@nal.usda.gov

speccoll@nal.usda.gov

ttic@nal.usda.gov

wqic@nal.usda.gov

