The National Agricultural Library - providing tools for education and development in agriculture

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Abstract:

The National Agricultural Library (NAL) plays a vital role in enhancing the development of research, education, and applied agriculture. The NAL has a mission to increase the availability and utilization of agricultural information for researchers, educators, policymakers, consumers of agricultural products, and the public. The presentation will address how NAL’s services and programs support the role of government as “Societies’ Information Toolkits”. It will provide information on specific collaborative projects with land-grant universities, government agencies and international libraries that support the education and development of agriculture. These toolkits include the NAL Thesaurus, AgNIC, Information Centers, DigiTOP, and the ProciNorte Initiative.
Hello. I’m delighted to be given the opportunity to represent the United States National Agricultural Library (NAL) at IFLA this year for several reasons. First, I’m glad to provide information as it relates to agriculture since it is a part of our daily lives. Secondly, I’m honored to be here in Buenos Aires and to be have given the opportunity to present in Latin America on behalf of NAL. And finally, I’m excited about the theme of this section of the conference and presenting information that will be useful for those of you who work with agriculture-related information and/or to serve as a model for the development of similar services and programs at your libraries.

I joined the NAL in 2000, and currently work as the Food Safety Information Coordinator. My focus in the library is using technology to develop products that best meet the information needs of the food safety community. In this presentation, I will provide a brief overview of several of NAL’s services and programs which serve as information toolkits for the education and development of agricultural information.

The National Agricultural Library was created as the departmental library for the U.S. Department of Agriculture in 1862 and became a national library in 1962. One of four...
national libraries of the United States, it is also the coordinator for a national network of State land-grant and U.S. Department of Agriculture (USDA) field libraries. In its international role, the National Agricultural Library serves as the U.S. center for the international agricultural information system, coordinating and sharing resources and enhancing global access to agricultural data. The National Agricultural Library's collection of over 3.3 million items and its leadership role in information services and technology applications combine to make it the foremost agricultural library in the world.

As the Nation's primary source for agricultural information, the National Agricultural Library has a mission to increase the availability and utilization of agricultural information for researchers, educators, policymakers, consumers of agricultural products, and the public. The Library is one of the world's largest and most accessible agricultural research libraries and plays a vital role in supporting research, education, and applied agriculture.

Its collection dates back to the 1500s with rare items such as letters written by President Abraham Lincoln, discontinued seed catalogs, monographs, and illustrations of fruit and vegetables drawn by artists before cameras were available for use by researchers. It also has a vast collection of books and journals, web sites and searchable online databases on specific topics of agriculture providing training and education materials, research abstracts and bibliographies. The library views its role in today’s society as an important aspect to preserving the agricultural history of the United States. Its mission is simple: to collect, organize and disseminate agricultural information to all people interested in the agricultural sciences. Today, it mainly uses the Internet to carry out this mission since it’s the easiest and most reliable method of reaching audiences all over the world.

Although the NAL has many projects and services such as AGRICOLA, an online bibliographic database with more than a million records, I will only touch on a few specific projects. I do encourage that each of you visit the NAL web site at http://www.nal.usda.gov to explore the many resources available at NAL.
In serving its mission to meet the information needs of people interested in agriculture, NAL supports several projects that assist with the education and development of society’s knowledge of agriculture. Each of the “toolkits” I will touch on support a different area of society, whether it’s students, teachers, consumers, researchers, the agricultural industry, or government workers. The “toolkits” include the NAL Thesaurus, the Agricultural Network Information Center, DigiTOP, its Information Centers Research Branch, and the ProciNorte Initiative.

The NAL Agricultural Thesaurus web site is an online tool for browsing agricultural and biological concepts and terminology. The thesaurus arranges terms in a structured format to help find terms of possible interest.

2004 Edition Statistics:
- Subject Categories - 17
- Total Terms - 62,478
  - Preferred Terms - 40,521
  - Node Labels - 95
- Lead-in Terms - 21,862
- Scope Notes - 477
- Definitions - 1,586

NAL Agricultural Thesaurus (NALT) is intended for indexing materials and for aiding retrieval in agricultural information systems. The thesaurus was prepared by staff of the National Agricultural Library in Beltsville, Maryland, to meet the needs of the United States Department of Agriculture (USDA), Agricultural Research Service (ARS), for an agricultural thesaurus. Funds for development were provided by USDA's Agricultural Research Service, National Program Staff. Throughout the development of the first edition, the thesaurus was reviewed by ARS Scientists and specialists in the field of agriculture. NALT is the controlled vocabulary of NAL's bibliographic database of citations to agricultural resources, AGRICOLA. The Food Safety Research Information Office (FSRIO) and Agricultural Network Information Center (AgNIC) use the NALT as
the controlled vocabulary of their information system. NALT is used for browsing at the ARS and AgNIC web sites.

NAL Agricultural Thesaurus is organized into 17 subject categories. The seventeen top subject categories are designated by "Subject Category." The categories are derived from the NAL Agricultural Classification Prototype that was developed for Agricultural Information Network (http://www.agnic.org). The subject scope of agriculture is broadly defined in Agricultural Thesaurus, and includes terminology in the supporting biological, physical and social sciences. Biological nomenclature comprises a majority of the terms in the thesaurus and are located in the Taxonomic Classification of Organisms subject category. Political geography is mainly described at the country level. The core subject areas of interest to the ARS National Program Staff have received primary development. Other subject areas, which are accommodated in the overall structure, will be addressed in upcoming versions.

The NAL Agricultural Thesaurus (NALT) is now available via a Web Services (SOAP) interface. This new interface provides your web applications direct access to all relationships and notes in the Thesaurus.

Before Web Services, programmers had to download the entire thesaurus and write their own software to incorporate the database into their applications. Now with Web Services, updates to the thesaurus are immediately and seamlessly available.

To obtain a copy of the Agricultural Thesaurus contact the Thesaurus Staff:thes@nal.usda.gov

AgNIC’s infrastructure

- 43 partners specializing in specific subjects
- Members include
  - US land-grant universities
  - Latin America’s SIDALC
- Portal provides easy method to create a web site for organization on a topic

Visit the AgNIC portal at: http://www.agnic.org

The AgNIC (Agriculture Network Information Center) Alliance began in 1995 with land-grant institutions and the National Agricultural Library committed to a partnership to provide access to quality information and resources over the Internet. This vision continues to sustain a collaborative alliance. This collaboration is between libraries and Cooperative Extension; between libraries and academic departments within colleges; between states who unite around a common agricultural theme or sub-discipline; between
technologists and librarians who are committed to using technology to knit disparate information resources into a cohesive whole. The results of these partnerships are rich collections of essential information and services offered to users around the globe. The collaboration and contributions of the partners allow the institutions to meet local, national, and international needs in a cost-effective manner.

Agnic’s 43 partners meet in the spring each year at the National Agricultural Library in Beltsville, Maryland. At that meeting, the partners discuss new developments; showcase projects; present ideas and issues; evaluate past performance; and plan for the future of the partnership.

AgnIC has provided leadership at NAL in developing a recently-released portal to access agricultural information, using the NAL thesaurus for its taxonomy and organizing a successful and cost-effective collaboration environment for government agencies and academic institutions.

For specifics on membership, governance, meeting notes and other types of information on AgNIC, please visit the AgNIC web site.
The Information centers at NAL provide a very unique niche in our library environment. Each information center is created by a congressional mandate through the United States Congress and/or a growing demand for specific information on an agricultural topic.

NAL currently has seven information centers specializing in Animal Welfare, Alternative Farming, Technology Transfer, Food and Nutrition, Food Safety, Rural Information, and Water Quality. Each information center is staffed with a coordinator, and one or more information specialists. The largest information center is the Food and Nutrition Information Center which receives a majority of its financial support from the USDA’s Food and Nutrition Service, its followed by the Animal Welfare Information Center that is supported by funds allocated by the US Congress. The information centers work very closely with USDA and its researchers, other federal and state agencies, academic institutions, professional groups, and etc.

Each information center currently provides a reference service and has a web site that provides relevant information to its users. However, based on the information needs of its audience, each center develops specific products to educate its target audience.

For example:
- Water Quality (www.nal.usda.gov/wqic) has developed a searchable database of water-related resource;
- Rural Information (www.nal.usda.gov/ric) has a Frequently Asked Questions section that is very popular with its users;
- Food and Nutrition (www.nal.usda.gov/fnic) has databases on nutrition education materials for professionals and recently released online training modules;
- Food Safety (www.nal.usda.gov/foodsafety) has a research projects database for the research community and an online discussion group for information sharing among food safety trainers;
- Technology Transfer (www.nal.usda.gov/ttic) has recently assisted with the patent of the super slurper;
Animal Welfare (www.nal.usda.gov/awic) provides training to professionals on proper animal care techniques; and
Alternative Farming (www.nal.usda.gov/afsic) is digitizing journal articles on organic research conducted in the early 1900s that is not available in digital format.

NAL also has several other programs that provide similar services in the areas of invasive species (www.invasivespecies.org) and aquaculture information which can be found through the Alternative Farming Information Center Web site.

As a national library, NAL has a long-standing history in working with other countries to develop their agricultural information networks. In 2002, NAL began a Memorandum of Understanding with the Universidad Autónoma Agraria “Antonio Narro” (UAAAN) located in Saltillo, Mexico as part of the Inter-American Institute for the Cooperation on Agriculture (IICA) Agricultural Library and Information Services Initiative.

The initiative also includes Canada’s Agricultural Library (CAL), and serves to foster the cooperative interactions of mutual interest to support the agricultural sector of the region by improving access to relevant information, improve access to Mexican agricultural information in the United States and Canada, strengthen the network of Mexican agricultural libraries, provide information support services to the other ProciNorte taskforces and support hemispheric integration of agricultural libraries.

Some examples of accomplishments include
- Strengthening the role of UAAAN as a depository library for NAL and CAL in Mexico by providing surplus materials and USDA publications to UAAAN,
- Providing Spanish translations for NAL document delivery services to allow for better access to journal articles
- Web site linkages on each organizations web site,
- An internship program at Canada’s Agricultural Library focused on research and information management, and
• Annual meetings held in Mexico, Canada and in the United States at NAL in October 2004.

**DigiTOP**

- USDA’s Digital Desktop Library
  - Launched in January 2003
  - Access to journals, newspapers, etc.
  - Subject guides available on web site

Visit the DigiTOP Web site at: http://www.nal.usda.gov/digitop

DigiTop, the Digital Desktop Library for USDA, brings published information about agriculture and its related sciences onto the computer desktop of USDA employees. During this one-year pilot the National Agricultural Library has combined funding from USDA agencies to acquire USDA-wide licenses to the vital information of agriculture. DigiTop provides 24-hour-a-day access to key databases, journals, newspapers, statistics, and other important digital information resources.

While DigiTop is currently weighted towards products that focus on scientific research, you will also find many resources that should be useful to the work of USDA agencies that are not research based. For example, check out the Leadership Library to locate information on key institutional leaders, EIU Country Reports for political and economic analysis and forecasts on numerous foreign countries, and the More Resources page for directories, dictionaries, and more.

DigiTop is available to all USDA employees, patrons of USDA at locations that are open to the public, for example NAL, and, in most cases, contractors, cooperators, and volunteers performing work on behalf of USDA.

FY2003 is considered a pilot year for the DigiTop project. Information resources for 2003 were funded through voluntary USDA agency and area contributions. The primary contributor was the Agricultural Research Service (including NAL). NAL is working to identify a more permanent funding mechanism.
NAL is moving forward trying to meet the information needs of individuals across the globe. Our mission is to become a National Digital Library for Agriculture. I hope the “toolkits” I’ve touched on give you some insight as to the type of programs and services we have at NAL that support the education and development of agriculture world-wide.

For more information please visit the NAL web site.

Thank you.

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