

FORAGE INFORMATION SYSTEM ON THE WORLD WIDE WEB

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ABSTRACT

The Forage Information System on the World Wide Web (FIS WWW) is a global forage information resource envisioned to become a comprehensive information system for all aspects of forages. WWW technologies provide an opportunity to link people and information in a work-sharing and access-on-demand environment via interlinking of computers. The FIS is a collection of Internet-based forage information linked and accessible via WWW access software programs (browsers), like Netscape[®]. Browsers provide a unified interface for information on the Internet. They make it possible to access formatted text, color pictures, sound, and video. The "superstructure" for FIS WWW is being developed at Oregon State University. Major sections of FIS WWW include What's New, Contents, Search, Topics, Resources, Classes, Organizations, and Projects. Topic subsections include Species, Pasture, Hay, Silage, Cover Crops, Quality, Animals, Pests, Statistics, and Economics. The URL address is: <http://www.forages.css.orst.edu/>. Contributions are welcome. Please contact us at webmaster@forages.css.orst.edu.

KEYWORDS

WWW, virtual center

INTRODUCTION

To remain a viable educational and informational organization, the USDA Extension Service must incorporate new information technology. Budget reductions have cut deep into our ability to provide information and educational programs using traditional approaches. We must look beyond county and state boundaries and combine resources nation-wide (and internationally) to develop expanded programs to meet increasing needs. Electronic technologies provide an opportunity to do this through Global Information Systems for Decision Support (GISDS) (Green and Hannaway, 1996).

The Forage Information System (FIS) on the World Wide Web (WWW) is a pioneering effort in the realm of GISDS. It is being developed to provide links to worldwide forage-related information (Hannaway et al., 1996).

METHODS

The unique characteristics and capabilities of electronic media require new ways of preparing and using information. Scanning and pasting existing printed publications into CD-ROMs or onto the WWW does not fully utilize the capabilities inherent in electronic media for information and education: layered multimedia, chunked, encyclopedia-like information with inquirer driven links.

Creation of modules within specific GISDS will be cooperative efforts of USDA CSREES national program leaders, professional societies, Extension and education faculty, and clientele groups. Informational files will be dynamic - evolving continuously with updated information, not confined to the time, space, and geographical constraints of books and CD-ROMs.

The national focal point for development of GISDS in the various disciplines is envisioned to be the respective CSREES national program leader. Agronomic crops, however, currently is lacking a national program leader. In the absence of that position, the livestock and electronic technologies coordinator is assisting with leadership

in this area (Eastwood, 1996).

Interactive development of the individual electronic information files by subject matter, communications, and information science faculty will efficiently produce information segments ready for peer review by similar review teams. The review-revision process will provide quality control, professional development, and enhance widespread use of the information system due to distributed "ownership." Involvement of national clientele groups, such as the National Dairy Association involvement in the National Dairy Database development (Eastwood et al., 1996), will be invaluable in making the various GISDS responsive to user needs and preferences.

The "superstructure" for FIS WWW is being developed at Oregon State University on a SUN SPARC[®] Station 5 under the Solaris[®] 2.4 operating system. The X-Windows[®] server software version and HoTMetaL PRO[®] are being used for html document authoring.

RESULTS AND DISCUSSION

Development of FIS WWW has proceeded along the lines of interest and expertise areas of the developers and clients. The "superstructure" has been created and components are being added as colleague participation and funding permits.

Recent progress has been made in the area of creating a template for "International Forage Fact Sheets." Most developed at this time is the "fact sheet" for perennial ryegrass (Evers et al., 1996). Subsections have been developed and linked and material in each has been developed by subject matter experts with the assistance of graphic artists and communication specialists.

Resource information for Extension forage specialists has been added in the form of a click-sensitive U.S. map (Hannaway et al., 1995). Information about each state forage specialist and a picture of each is available for viewing.

Vendor information for forage and turf seed companies has been added to the Resources/Vendors/Seed subdirectory (Hannaway and Griffith, 1996). Material has been compiled with the help of seed companies and links were made to their respective WWW sites. Future steps include linking vendor product lines to the species information segments.

Material developed under the Classes section includes links to forage classes in the U.S. and to the USDA Challenge Grant that is developing a national forage curriculum (Hannaway and Niess, 1996). This project involves the collaboration of forage instructors from around the U.S. in concert with instructional design and graphic artist specialists.

The forage Organizations section includes links to the major forage organizations in the U.S. and to international forage organizations as WWW segments for those organizations are developed. Currently this includes links to the American Forage and Grassland Council (AFGC), the Canadian Forage Council, the Certified Alfalfa Seed Council, the North American Alfalfa Improvement Conference, the Center for Grassland Studies, the Grazing Lands Conservation

Initiative, and the Grazing Lands Forum. Links have been made to a few international forage organizations. Further collaboration with forage scientists from around the world is solicited for further development of the international components of FIS.

The Projects section includes international, national, regional, and state forage-related projects. These include current projects in China and Mexico, the International Forage and Livestock Organization effort of the AFGC, and various regional research and extension projects. Linkage to projects around the world are particularly welcome and can be accomplished by contacting us at webmaster@forages.css.orst.edu. We look forward to further collaboration and development of FIS.

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