

Reports from CSREES Program Areas

BUDGET AND STATUS REPORTS

- **2004 Department Budget Request Submitted to Office of Management and Budget (OMB):** The Fiscal Year (FY) 2004 Department Budget Request, which includes CSREES' request, was submitted to OMB in early September. It is anticipated that OMB will provide agencies with the FY 2004 passback in late November. The FY 2004 President's Budget is due to Congress on February 3, 2003. Currently the federal government, including USDA, is operating under a short-term continuing resolution that provides funding through November 22, 2002, at the FY 2002 funding level. Contact: Tina Buch, USDA/CSREES-tbuch@reeusda.gov.

CSREES LONG-TERM PLANNING

- **GAO Highlights CSREES' Expanded Food and Nutrition Education Program (EFNEP):** CSREES' EFNEP Reporting System was one of five federal programs GAO selected to examine to assist agency efforts to evaluate and improve the effectiveness of federal information dissemination programs. Case study methods were applied to identify useful behavior change and evaluation strategies that other agencies might adopt. For a copy of the report, Program Evaluation (#02-923), see <http://www.gao.gov/new.items/d02923.pdf>. Contact: Mel Mathias, USDA/CSREES-mmathias@reeusda.gov.
- **3rd International Conference on Microbial Genomes To Be Held:** CSREES is partially funding the 3rd International Conference on Microbial Genomes, to be held in New Orleans January 29-February 1, 2003 (<http://www.asmus.org/mtgsrc/MG3g.htm>). The genomics of agriculturally important microorganisms will be a topic. The forum will establish new collaborations among and between agricultural, biomedical, and environmental researchers. Contact: Ed Kaleikau, USDA/CSREES-ekaleikau@reeusda.gov.

NEW CSREES STAFF AND SPECIAL ASSIGNMENTS

- **CSREES Scientists Fulfill Special State Department Needs:** Three scientists from CSREES' Plant and Animal Systems (PAS) unit recently accepted temporary postings at U.S. embassies in Germany, Costa Rica, and Greece through the U.S. Embassy Science Fellows Program. The program places U.S. Government scientists and technical experts at U.S. embassies for limited periods to provide to host countries requested scientific expertise, advice, and technical or project assistance about science and technology-related issues. Anne Marie Thro was assigned to Munich, Germany, to work with biotechnology research issues. Richard Hegg was assigned to Athens, Greece, to work with agriculture-related water resources and environmental issues. Kitty Cardwell traveled to San José, Costa Rica, to cooperate on biotechnology issues. Contact: Hiram Larew, USDA/CSREES - hlarew@reeusda.gov.
- **CSREES/EPA/Purdue Build Water Partnerships:** Jane Frankenberger, Purdue University Extension Water Quality Specialist and Associate Professor of Agricultural and Biological Engineering, has begun a joint Intergovernmental Personnel Act (IPA) agreement with CSREES and EPA to investigate research and extension opportunities associated with the EPA Total Maximum Daily Load (TMDL) rule. This IPA agreement began October 2002 and runs through May 2003. Contact: Jane Frankenberger, USDA/CSREES - jfrankenberger@reeusda.gov.
- **Leadership Exchange Program Enjoys Continued Success:** An innovative leadership exchange program for CSREES national program leaders and their agricultural and land-grant counterparts is giving partners a firsthand opportunity to become more familiar with each other's organizational structures, position responsibilities, and research, extension, and education activities. In the most recent exchange, Carmela Bailey, USDA/CSREES/PAS, spent a week at Michigan State University. Gale Arent, Michigan

State University, Associate Extension Director, visited CSREES in Washington, DC. Contact: Dan Kugler, USDA/CSREES- dkugler@reeusda.gov or Ralph Otto, USDA/CSREES- rotto@reeusda.gov.

COMMUNICATIONS ACTIVITIES

■ **New CSREES Web Site Being Developed:**

CSREES has awarded two firms, Andrulis and S2N Media, a contract to design and implement a new Agency Web site. The contractors' work will build upon a protosite developed that reflects the work of the Agency and incorporates success stories from the USDA/Land-Grant University partnership. The first contract phase will involve communications strategizing and Agency branding. Rollout of the new site will occur in late 2003. Contact: John Snyder, USDA/CSREES - jsnyder@reeusda.gov.

■ **New Online Resources Available to the**

Partnership: Two new resources are available to increase the cooperation and collaboration of the CSREES/Land-Grant University Partnership. The "CSREES Plant Sciences Update" briefs our land-grant and government partners on the Agency's crop production and pest management activities since 1998. The "Pesticide Safety Education Program Quarterly" addresses issues related to pesticide safety education professionals. Both resources are accessible from the CSREES homepage (<http://www.reeusda.gov>) by selecting the "News and Information" category. Contact: Bill Hoffman, USDA/CSREES - whoffman@reeusda.gov.

PEOPLE AND NUTRITION INITIATIVES

■ **CSREES Research Projects Target Obesity and Diabetes in Native Americans:** CSREES supports several activities aimed at reversing the national obesity epidemic to support President Bush's Healthier U.S. Initiative. A unique CSREES-funded research project, "Wellness In (WIN) the Rockies," identifies environmental factors that contribute to obesity and forms the basis for community-led interventions to improve diets and physical fitness. Another significant grant involved the Woodlands Wisdom project, which is developing improved food and a nutrition curricula for Tribal college students focused on Native

Americans' most critical health problems - obesity and diabetes. The Cooperative Extension System has an active Childhood Obesity Task Force working on "Reversing the Trends in Childhood Obesity" by disseminating research findings and providing educational materials for Extension faculty. Contact: Susan Welsh, USDA/CSREES - swelsh@reeusda.gov.

■ **New American Communities Web Site:**

A new Web site featuring case studies of promising practices in community-based entrepreneurial development is available at <http://www.newamericancommunities.org>. The Web site represents the combined efforts of USDA/CSREES/ECS (Economic and Community Systems) and the Southern Rural Development Center (SRDC) with funding from CSREES. Program Web site developers are also working with ECS and SRDC to host an E-Search Conference and Tool-Kit on Web-based interactive planning for use by land-grant partners to help strengthen community-led entrepreneurial development. Contact: Tony Smith, USDA/CSREES - tonysmith@reeusda.gov.

■ **Public's High Interest in Fruit and Vegetable**

Consumption: A Congressionally requested GAO study and a Memorandum of Understanding on the 5-a-Day program signed by USDA and the Department of Health and Human Services demonstrate the public's high interest in fruit and vegetable consumption. In December 2002, at the Future of Our Food and Farms Summit, CSREES and the National Cancer Institute will sponsor a workshop to solicit stakeholder input about partnership efforts. CSREES-supported food research is examining ways to increase the bioactive compounds in fruits and vegetables and has documented how bioactive compounds in broccoli, spinach, and kale vary by environment and cultivars. A multi-institutional research intervention project is finding new ways to increase fruit and vegetable intake among adolescents. CSREES' Expanded Food and Nutrition Education Program has been cited as one of the most successful programs for increasing fruit and vegetable intake by 1.8 servings per day. Contact: Edith Thomas/Wells Willis, USDA/CSREES - ethomas@reeusda.gov/wwillis@reeusda.gov.

■ **Cooperative Effort Develops the 4-H**

Afterschool Program: A national image of 4-H Afterschool is being created through a cooperative effort among CSREES, the National 4-H Council, states, and counties. This effort will bring together a variety of afterschool programs already in place, such as those involved in the Extension Cares For America's Children and Youth National Initiative (ECI); the Children, Youth, and Families at Risk program; the USDA/Military Partnerships; and all other afterschool efforts being conducted by Cooperative Extension Service staff. Peer-reviewed curricula and training materials are being developed to assist Extension staff with starting 4-H clubs in afterschool programs. A Web-based, user-friendly reporting and evaluation system is being developed to provide reports directly back to county Extension staff and aggregate data across counties, regions, and states. Contact: Nancy Valentine, USDA/CSREES - nvalentine@reeusda.gov.

INFORMATION TECHNOLOGY UPDATES

■ **New Leadership Team in CSREES ISTM Unit:**

Ted Bauer is the new Information Systems and Technology Management Unit (ISTM) Operations Director. He brings a wealth of experience to the operations side of the ISTM unit as former director of CSREES' Current Research Information System (CRIS). Michel Desbois is the new ISTM Applications Director. His experience at NIH's National Institute on Drug Abuse will be a valuable addition to ISTM's information technology applications and operations work. Contact: Sally Rockey, USDA/CSREES - srockey@reeusda.gov.

■ **e-Extension Prepares for Launch:** e-Extension is a national effort to build a web-based information and education network for current and new audiences meant to transform and redefine the work of Extension. A research team recently met at Purdue University, and administrators and staff met in Atlanta to scope the project, resulting in a cooperative agreement among USDA/CSREES, Mississippi State University, and the National Association of State Universities and Land-Grant Colleges. A panel of senior executives representing business, education, and government, many outside of Extension, will help shape the business

plan. A series of regional meetings will build consensus inside the organization. A think-tank will determine prototype and implementation requirements. Contact: Greg Crosby, USDA/CSREES - gcrosby@reeusda.gov.

LEGISLATIVE UPDATES

■ **Legislative and Farm Bill Update:** USDA-CSREES has been working with the land-grant system to implement the Farm Security and Rural Investment Act of 2002 (FSRIA) signed by the President in May. FSRIA provided \$8 million for grants to youth-serving organizations to enhance opportunities for youth development programs in rural areas. CSREES has also been working with state partners and agencies like NRCS to ensure that land-grant extension and research programs are fully brought to bear on the challenges presented by the enormous expansion of agricultural conservation programs in FSRIA. The Agency has begun to work with partners on the implementation of formula-fund matching requirement changes for 1890 and Territory schools, and other procedural changes mandated in competitive grants programs. CSREES and its partners are informing producers and rural communities about programs and opportunities available as part of the FSRIA. CSREES is participating in a USDA program briefing being held at Virginia State University that will focus on programs available through the Farm Bill and USDA. Contact: Phil Schwab, USDA/CSREES- pschwab@reeusda.gov.

ENVIRONMENTAL AND RESOURCE ACTIVITIES

■ **Pilot Project Tests CSREES' National Atmospheric Deposition Program's Potential Role in Biosecurity Diagnostic Network:** CSREES' National Atmospheric Deposition Program (NADP), with nearly 300 monitoring sites across the U.S.—many at agricultural experiment stations and rural locations—is a mature environmental monitoring program with an established sampling infrastructure and validated analytical protocols. NADP is being examined for its potential to serve as a component of an early warning system for detection and mapping of chemical, biological, and radiological agents that could be used against U.S. agriculture. A pilot project is currently being conducted with a veterinary school to determine

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the potential for testing for the presence of anthrax and other microbes in rain samples.

Contact: Dan Jones, USDA/CSREES - djones@reeusda.gov.

- **Consortium for Agricultural Soil Mitigation of Greenhouse Gases:** With \$15 million authorized by the Agricultural Risk Protection Act of 2000, CSREES funded the Consortium for Agricultural Soil Mitigation (CASMGs), which will provide information and technology necessary to develop, analyze, and implement carbon sequestration strategies. Soil carbon sequestration has the potential to reduce greenhouse gas buildup in the atmosphere while improving America's farmland and the nation's agricultural economy. The consortium consists of scientists from eight land-grant universities—Colorado State University, Iowa State University, Kansas State University, Michigan State University, Montana State University, University of Nebraska, Ohio State University, Purdue University—and a Department of Energy Laboratory, Pacific Northwest National Laboratory. Scientists from USDA-ARS and NRCS are collaborating with the universities. Dr. Chuck Rice (cwrice@ksu.edu) at Kansas State University serves as coordinator. CASMGs also works with internationally recognized researchers and institutions. See Web site: <http://www.casmgs.colostate.edu/>. Contact: Ray Knighton, USDA-CSREES - rknighton@reeusda.gov.

- **CSREES To Convene McIntire-Stennis Administrative Technical Representatives:** As part of the Agency's total partnership efforts, CSREES will hold the first biennial meeting of Administrative Technical Representatives (ATR) of the McIntire-Stennis Cooperative Forestry Program December 3-4, 2002, in Washington, DC. Participants will prioritize forestry research for the next 5 years, multi-state research programming, stakeholders' input requirements and accountabilities, allocation of funds, research proposal requirements, emerging issues in forestry, and research impacts. An association of ATRs will be formed for better coordination and representation in policy and research decisions. Contact:

Catalino Blanche, USDA/CSREES - cblanche@reeusda.gov.

CSREES GRANT POLICY UPDATES

- **Development of New Program Ideas and Review Priorities:** As a first step in planning for possible increased FY 2003 funding for the NRI Competitive Grants Program and the Section 406 Integrated Research, Education and Extension Program (406), CSREES is currently engaged in a process to develop new program ideas and review priorities for existing programs and activities. Combined with other stakeholder input, this process will assure competitive programs. Contact: Mark Poth, USDA/CSREES - mpoth@reeusda.gov.
- **CSREES Given Responsibility for "2501" Competitive Grant Program:** Secretary Veneman has delegated to CSREES the responsibility for the "2501" or Outreach and Assistance for Socially Disadvantaged Farmers and Ranchers Competitive Grant Program. An RFA is scheduled for release in early November 2002. Contact: Elizabeth Tuckermanty, USDA/CSREES - etuckermanty@reeusda.gov.
- **1890 Capacity Building Grants Program Makes 41 FY 2002 Awards:** CSREES has released 41 awards (24 teaching, 17 research) totaling nearly \$8.8 million to 15 1890 institutions in 14 states to support the design and implementation of innovative teaching and research projects in targeted-need areas of the food and agricultural sciences. For a summary of funded projects, see the CSREES Web site (<http://www.reeusda.gov/serd/hep/hep.htm>). The proposed Request for Applications for FY 2003 is scheduled for release on November 18, 2002. Contact: Richard Hood, USDA/CSREES - rhood@reeusda.gov.
- **Upcoming CSREES Stakeholder Workshop:** A CSREES 1-day stakeholder workshop planned for November 14, 2002, will seek input for a new 5-year plan for its National Plant Genome Initia-

tive (NPGI). CSREES provides leadership and funding for the NPGI. Recommendations from the National Research Council and input from stakeholder workshops, including the one set for November 14, will be the basis for setting new goals and priorities. Publication and rollout of the new plan is anticipated in January 2003 at the Plant and Animal Genome meetings in San Diego, CA (<http://www.intl-pag.org>). Contact: Ed Kaleikau, USDA/CSREES-ekaleikau@reeusda.gov.

■ **CSREES and Partners To Observe**

Completion of Genome Project: CSREES, the National Science Foundation (NSF), and the Department of Energy (DOE) competitively funded two U.S. projects in 1999 to participate in the International Rice Genome Sequencing Project (IRGSP). The multinational project, comprised of 10 countries, will come to fruition by year's end. With the complete sequence, the National Science and Technology Council (NSTC) Interagency Working Group (IWG) on Plant Genomes, of which CSREES is a partner, will develop a rice functional genomics program to serve as the key genome deciphering model for all plants, especially cereals. The research will associate sequence information with pathways or networks of genes to increase our knowledge of disease resistance, nutrition, growth and development, fiber quality, oil content, and other agriculturally important traits. Events in Japan and Washington, DC, will be held in December 18 to announce research achievements. Contact: Ed Kaleikau, USDA/CSREES - ekaleikau@reeusda.gov.

■ **Annual Meeting of Extension Indian**

Reservation Program (EIRP) Held: Project directors and extension educators, including representatives of the 28 EIRP projects located in 12 states, attended the Extension Indian Reservation Program (EIRP) annual meeting October 27-28 in Tucson, AZ. Discussion included highlights of Arizona and other state extension programs in

Indian country, increasing partnerships and collaboration, and a review of streamlined administrative procedures. EIRP representatives also presented program highlights at the Intertribal Agriculture Council Annual Symposium on October 31 in Tucson. Contact: Joan Gill, USDA/CSREES - jgill@reeusda.gov.

SCIENCE BREAKTHROUGHS

■ **CSREES-Funded Researchers at Utah State University Discover Way To Protect Turkeys Against Aflatoxin B1:**

A CSREES-NRI grant has funded researchers at Utah State University, led by Roger Coulombe, who discovered that turkeys are protected against aflatoxin B1 by the addition of the inexpensive, FDA-approved food additive BHT to their feed. Aflatoxin B1 is the most important mold-produced toxin in occurrence and toxic potency, and poultry, especially turkeys, are most susceptible to its effects. The team will establish the safety requirements for industry-wide implementation. Contact: Peter Johnson, USDA/CSREES- pjohnson@reeusda.gov.

■ **New Vaccine Developed To Solve Billion-Dollar Problem:**

The blood-sucking horn fly, *Haematobia irritans*, is a billion-dollar pest of livestock in North America. Drs. Eddie and Mary Cupp of Auburn University discovered and purified a protein in the horn fly's saliva that delays blood clotting and cloned the genetic information encoding this factor. CSREES-National Research Initiative funded the basic research which allowed the researchers to move their discovery forward to a commercial level with Novartis, one of the world's top pharmaceutical firms, to design an anti-feeding vaccine to protect cattle from this devastating disease. Contact: Mary Purcell-Miramontes, USDA/CSREES - mpurcell@reeusda.gov.

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CSREES Administrator's Report to the Partnership Fall 2002

The mission of the Cooperative State Research, Education, and Extension Service (CSREES) is to advance knowledge for agriculture, the environment, human health and well-being, and communities. In support of this mission, CSREES program areas have undertaken the following new initiatives and activities and/or addressed "hot" and emerging issues detailed in this report.

Advancing Knowledge for the
Food and Agricultural System



Message from the CSREES Administrator:

Staff across CSREES are working on projects to expand technology use in the Agency and with our partners as part of President Bush's e-Government initiative. Many institutions have participated in test protocols for our e-Grants system, which will be implemented by October 2003. CSREES has led USDA-wide e-Grants development as one of 12 major government functions to make USDA available to citizens anywhere, anytime. Our Information Systems and Technology Management (ISTM) Staff is leading this effort.

CSREES and extension leaders across the nation are working together to create a vision and prototype for e-Extension. Building on ideas originally developed by Ron Brown (executive director of the Southern Extension Directors) and Dave King (Purdue), the e-Extension team has expanded to include the American Distance Education Consortium (ADEC), the National Association of State Universities and Land-Grant Colleges (NASULGC), and a group of private advisors to present an approach to expanding access to extension nationally through Web-based or other mass media. The planning team will begin a series of meetings around the country early in 2003 to engage extension and the community we serve—or could serve—in discussions.

We also have launched a project to redesign the CSREES Web site. The goal is to streamline and add functionality to the business processes conducted over the Web, at the same time improving customer information by linking to land-grant university and other partner sites. We hope to have the new site running next fall.

Our, ISTM staff is working so CSREES will have the tools it needs for rapid response to our customers. They are issuing and providing training in the use of personal digital assistants (PDAs) to CSREES program leaders. The PDAs provide wireless connection to e-mail and include a very portable, fold-out, full-size keyboard, creating something close to a laptop computer. I hope the expansion and utilization of these technologies improves our service to you, our partners and customers.

— Colien Hefferan



United States Department of Agriculture
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