



February 2012 Update

- Seventeen K-State scientists will join researchers from the University of Nebraska-Lincoln and other universities and government agencies in a coordinated, multi-pronged approach to improve the safety of beef. The \$25 million effort will focus on ways to reduce the occurrence and public health risks from Shiga toxin-producing *Escherichia coli* (STEC), a serious threat to the food supply that results in more than 265,000 infections in the United States each year. K-State food scientist Randy Phebus will join four others on the overall project's executive management team, which will oversee seven inter-related projects that span the five-year life of the grant.
- Entomology professors Jim Nechols, David Margolies, and Raymond Cloyd and former master's student Lessando Gontijo published "Plant architecture and prey distribution influence foraging behavior of a predatory mite" in *Experimental and Applied Acarology*, an international scientific journal. They argued that arrangement, number and size of plant parts may influence predator foraging behavior. The study suggested that both plant architecture and pattern of prey distribution need to be considered in augmentative biological control programs.
- Kyle Steele (B.S. '09 food science, M.S. '11 animal science) and Melissa Weber (M.S. '07, Ph.D. '11 animal science) working with professors Elizabeth Boyle and Melvin Hunt, found that using light-emitting diode (LED) lights in refrigeration units saves energy for meat retailers and extends the shelf life of some beef products. Steele will give a research presentation at the Capitol Graduate Research Summit in Topeka in February.
- Dan Devlin, professor of agronomy and director of the Kansas Center for Agricultural Resources and the Environment (KCARE), and Xiuzhi "Susan" Sun, distinguished professor of grain science, were added to the Kansas Ad Astra's Science in Kansas: 150 Years and Counting project. Devlin was selected for his research in water quality related to conservation practices and watersheds. Sun was chosen for her accomplishments in creating and researching bio-based materials. She has eight patents, including a soy-based, water resistant adhesive that is used to make safer, more natural barrels for cattle feed. For more information, visit http://www.adastra-ks.org/events/150_scientists_index.html.
- To combat eastern redcedar encroachment problems in the eastern two-thirds of Kansas, range management specialist Carol Blocksome and several colleagues developed a redcedar calculator that allows a cattle producer to roughly determine the amount of forage lost to redcedar encroachment. The calculator can be found online at <http://ksfire.org/p.aspx?tabid=15> under "Reasons for Burning."
- K-State received a \$3 million grant for, "Novel Sorghum-Based Fortified Blended Foods for Infants and Young Children," which will focus on developing nutritionally sound, fortified blended foods using combinations of corn and soy, sorghum and soy, and sorghum and cowpeas. It is part of the Micronutrient Fortified Food Aid Products Pilot initiative of USDA's Foreign Agriculture Service. Grain scientist Sajid Alavi is the principal investigator.
- Sid Stevenson, associate professor of recreation resources, was highlighted in the December issue of *Parks & Recreation* magazine for his efforts in compiling the statewide park and recreation geodatabase and then converting that dataset to the National Recreation and Park Association GIS model, making Kansas the first state with comprehensive coverage.