



# College of Agricultural, Consumer and Environmental Sciences

Department of Extension Animal Sciences and Natural Resources Profile  
Cooperative Extension Service • [aces.nmsu.edu/ces/animal](http://aces.nmsu.edu/ces/animal) • 575-646-3326



## Mission Statement

The Department of Extension Animal Sciences and Natural Resources is committed to providing the citizens of New Mexico with research-based, practical, and applied educational programming that meets the demands New Mexico has in the agricultural and natural resource communities.

## Quick Facts

- Reached over 18,000 stakeholders—20% of whom were underserved minorities, including women, Hispanics, and Native Americans—through grassroots programming for youth, ranchers, Tribal members, and New Mexico industries.
- Brought in over \$2.3 million in funding and gifts.
- Provided information that directly affected the management of 27.5 million acres of federal, state, and privately owned range or forest land.
- Published 28 peer-reviewed journal articles, 25 Extension publications, and 14 popular press articles.
- Presented research findings and program materials in over 40 talks at regional and national conferences.

## ACES Pillars for Economic and Community Development

Food and Fiber Production and Marketing

Water Use and Conservation

Family Development and Health of New Mexicans

Environmental Stewardship

Foundational Education and Training

## Selected Program Impacts

- **Building resiliency in western fire-adapted forests.** The U.S. Forest Service spent over \$2 billion in 2017 suppressing wildfires, the most expensive year on record. Today's forest managers are seeking solutions to these problems. NMSU's forestry and fire program is providing managers with a demonstration area with over 10 years of data where managers can see first-hand how thinning and burning fire-adapted forests builds resilience to insects, disease, and wildfire.
- **Water is one of the most important natural resources in New Mexico.** Extension programming efforts targeting a diverse audience, including school children, Master Gardeners, landowners, and pesticide applicators, have increased knowledge and awareness of the importance of water quality. Participants in programs have improved knowledge by 78%, 94% have changed their attitudes toward how their practices impact water quality, and 74% indicated that they intend to change a current practice.
- **Trichomoniasis** infection in bulls causes pregnancy loss in cattle and can have a dramatic impact on producer profitability. In one year, losses in calf crop can be 10 to 30%—and as high as 50%—depending on the number of susceptible cows exposed to positive bulls. In 2005, 6.5% of bulls in a large area of north-central New Mexico tested positive for trichomoniasis. This resulted in trichomoniasis becoming a reportable disease in New Mexico. The following year, the NMSU Cooperative Extension Service developed a trichomoniasis control program for New Mexico, resulting in more testing, control measures, and producer awareness of the disease. Currently, trichomoniasis incidence in New Mexico has been reduced to 1.5% in over 16,000 tested bulls. Reducing the occurrence of trichomoniasis in New Mexico will increase producer profitability by increasing the number of calves born.
- **The U.S. Dairy Education & Training Consortium (USDETC)** teaches and trains the next generation of dairy professionals. NMSU Dairy Extension leads a consortium of universities to provide a practical dairy capstone course in a 6-week intensive summer training program in Clovis, NM, in collaboration with area dairy producers. In 10 years, 427 students from 48 universities have been trained; 4 out of 5 students are employed in agriculture, 2 out of 3 students are employed in the dairy industry, and 1 out of 3 students works on or manages a dairy. The USDETC received the 2017 Dairy Sustainability Award in Community Partnerships.



## Selected Partnerships and Collaborators

- All 33 counties in New Mexico
- Native American Tribal Centers
- NMSU Agricultural Science Centers
- eXtension
- NM Department of Agriculture
- Expo New Mexico
- NM Farm and Livestock Bureau
- NM Dairy Producers
- NM Horse Council
- NM Beef Council
- NM Cattle Growers
- NM Wool Growers
- Institute for Infectious Animal Disease
- Society for Range Management
- Range Improvement Task Force (RITF)
- NM Vegetation Management Association
- NM Game and Fish
- NM Livestock Board
- NM State Forestry
- Rio Grande Basin Initiative
- Multiple livestock breed associations, cooperatives, and producer groups
- Feed, pharmaceutical, and agrochemical companies
- USDA and USDI federal agencies, including BLM, NRCS, EPA, Forest Service, Fish and Wildlife Service, and Valles Caldera National Preserve
- Numerous universities, Extension Services, and USDA-ARS research laboratories throughout the U.S.

- **Educating youth on livestock production systems.** Less than 2% of the U.S. population is involved in agriculture. Of this population, the average age of active livestock producers is 58. Therefore, youth involvement and education in agriculture are needed to sustain and grow this very important industry. The New Mexico Youth Ranch Management Camp is an intensive learning program designed to educate high school-aged students in beef production and natural resource management. So far, it has educated over 150 New Mexico youth, and approximately 30% of participants have attended college to seek an agriculture-related degree.

## Faculty, Areas of Expertise, and Location

### Animal Sciences

- **John Campbell**, Judging Team Coordinator, Las Cruces Campus
- **Armando Garcia-Buitrago**, Research Scientist, Clovis Ag Science Center
- **Craig Gifford**, Beef Specialist, Las Cruces Campus
- **Robert Hagevoort**, Dairy Specialist, Clovis Ag. Science Center
- **Shanna Ivey**, Department Head, Ruminant Microbiologist, Las Cruces Campus
- **Shelly Spears**, Program Coordinator, Clovis Ag Science Center
- **Jason Turner**, Horse Specialist, Las Cruces Campus
- **Marcy Ward**, Livestock Specialist, Las Cruces Campus
- **John Wenzel**, Extension Veterinarian, Silver City

### Range Sciences

- **Doug Cram**, Wildland Fire Management Specialist, Las Cruces Campus
- **Casey Spackman**, Range Management Specialist, Las Cruces Campus
- **Vacant**, Brush and Weed Specialist, Las Cruces Campus

### Wildlife and Fisheries

- **Louis Bender**, Wildlife Specialist, Las Cruces Campus
- **Rossana Sallenave**, Aquatic Ecology Specialist, Las Cruces Campus
- **Sam Smallidge**, Wildlife Specialist, RITF Coordinator, Las Cruces Campus

### Support Staff

- **Kathy Bustos**, Administrative Assistant, Las Cruces Campus
- **Cecilia Marquez**, Fiscal Assistant, Las Cruces Campus