

# Why Ranchers Do What They Do

## Cooperative Extension's role in rangeland management

by California Rangeland Conservation Coalition Director Tracy Schohr, Gridley

**T**oday's ranch management has been influenced by a multitude of sources. Many practices have been passed down from one generation to the next, while others have developed over a shorter period of time through a multitude of trial by error experiments. In addition to the development of many on-ranch practices, countless management practices have been developed by the University of California Cooperative Extension (Cooperative Extension) range and livestock specialists.

What may come as a surprise to some is that cattle producer outreach and education by Cooperative Extension dates back to the early 1900's when Reuben Albaugh, the first cooperative extension advisor, was stationed in Monterey County.

Albaugh, a native of Lassen County,

was raised on a diversified livestock ranch and began his tenure as a livestock farm advisor in 1927. Albaugh served Cooperative Extension until his retirement in 1967, but worked diligently as an emeritus faculty member for 23 more years. As an instrumental part of the creation of the California Beef Cattle Improvement Association, Albaugh helped to grow and foster the role of Cooperative Extension to what it is today.

Many of the practices used by today's ranchers were formulated in collaboration with university researchers, Cooperative Extension advisors and ranchers. These studies were conducted at places such as the Sierra Foothills Research Extension Center, on U.S. Forest Service and Bureau of Land Management grazing allotments and on private ranches.

The methods developed were shared with the broader ranching community through the Cooperative Extension network, spreading information such as the benefits of fence-line weaning, grazing to control invasive species, cost-effectiveness of protein and selenium supplementation and performance carcass traits of crossbreeding. Two widely used practices of particular importance that were developed and shared through Cooperative Extension, include Residual Dry Matter (RDM) monitoring and the development of the Rangeland Water Quality Management Plan.

Recently retired 34-year veteran of Cooperative Extension, **Neil McDougald**, Friant, is credited with establishing RDM standards. This Western monitoring technique measures dry plant material left over



from the current year's growth as a way to gauge the health of rangelands. RDM replaced the range condition method, a once commonly used method that was not well applied or appropriate for California rangelands.

McDougald was instrumental in introducing RDM to the U.S. Forest Service and today, local, state and federal lands in California use this quick and simple way to evaluate the health and stability of rangelands.

As a cooperative extension advisor, McDougald also researched and shared various other management practices with ranchers and agencies to address the proper management of natural resources. During his tenure, he studied effective grazing in oak woodlands, developed mountain meadow standards, determined values of rangeland loss in wildfires, and created a system to determine livestock-carrying capacity for rural lands under the Williamson Act. The scientifically founded practices to evaluate rangelands helped individual producers increase their bottom-line and provided strong cases to support continued grazing on public and private lands throughout California.

In 1978, Mel George, Ph.D., Davis, joined the cooperative extension team as an irrigated and dry land pasture specialist. As he completes his final few months on staff, George recalls that one of his first projects was answering questions posed by ranchers regarding whether or not rotational grazing would increase stocking rates, as it purported to do.

Dozens of producers were asking Cooperative Extension if Allan Savory's rotational grazing method really worked. Curiosity led to the creation of the first set of rancher short-courses on rotational grazing. George was not shy to say he was unsure if landowners would respond positively to participating in a 3-hour long educational program for 3-weeks, in comparison to the normal traditional 20 minute extension talks.

In 1989, the livestock industry asked Cooperative Extension to help them address clean water issues. Many may recall (and still use today), the

California Rangeland Water Quality Plan and the associated water quality management planning courses hosted by Cooperative Extension. Alongside the California Cattlemen's Association and numerous producers, George used text books, University of California research and the California Board of Forestry Range Management Advisory Committee, to create workshops to assist ranchers in developing plans to address water quality on the ranch.

In a given year, George would log over 100 meetings on water quality, all in an effort to help ranchers be better land managers and to educate a diverse audience on the science behind rangeland management practices.

The science being developed today with George, and the University of California, Davis' Ken Tate, Ph.D., and Rob Atwill, Ph.D., is playing a critical role in public lands grazing management and is helping to inform discussions at Regional Water Quality Control Boards and in a variety of other venues.

Most recently, George's education method has begun using 21<sup>st</sup> century technology. A few years ago, he launched the first online grazing course. The project goal is to aid staff in government agencies, open space districts, county parks, water districts and non-governmental organizations who manage rangelands in the across the state. Ranchers are also invited to take the course!

The course covers the ecology and management of grazing, grazing as an agricultural production activity, grazing for managing vegetation and grazing's potential impacts on plants and ecosystems.

Individual ranchers can point to successful results from collaboration with Cooperative Extension, but the success does not stop there. George has often been asked to report the impact of the Cooperative Extension and can point to many successes and several awards.

"Our greatest reward and biggest impact was revealed in January. I think we can report that the extension and research program has had a great impact," states George when addressing the California Rangeland Conservation

Coalition 7<sup>th</sup> annual Summit and Inaugural Science Symposium that was held in conjunction with the California Rangeland Watershed Laboratory. This event drew more than 400 attendees to Davis and featured various scientific studies by Cooperative Extension and others in the University California system, while showcasing ranching operations that have worked closely with George and his colleagues.

Today, livestock producers throughout the state have the ability to call upon range and livestock advisors, as well as other specialists. This dedicated team is standing by to help answer ranchers' management questions, find solutions to challenges and provide advice in implementing practices to take advantage of newly developed economic opportunities.

One of the newest Cooperative Extension team members is Josh Davy from Red Bluff, who works in Tehama, Glenn and Colusa counties. Davy's focus is on range improvement, weed control, irrigated pasture production, and livestock management through practices such as mineral supplement.

"There is an opportunity for extension to continue providing research based information to our livestock producer clientele," states Davy.

Eighty-five years after Albaugh began his work in Monterey County, Cooperative Extension is still going strong and will continue to be dedicated to helping ranchers develop new studies, tips and tricks for optimal land management. Despite the retirement of both McDougald and George, the two plan to keep working in retirement to help educate the broader public about rangelands and aid in supporting working ranchers. Cattle producers up and down the state are thankful for the tremendous time, talent, perseverance and commitment of past, retiring, current and future cooperative extension range and livestock advisors.

For more information, visit any of the following Web sites: <http://californiarangeland.ucdavis.edu/>, <http://rangelandwatersheds.ucdavis.edu/> and [www.carangeland.org](http://www.carangeland.org)