Editorial
Range Research—A Must in Modern Management

Today's open range and large fenced areas of native range lands are laboratories for range research. Since Will C. Barnes, one of Arizona's great pioneers in the field of range management and a strong advocate for getting the facts associated with various systems of grazing on native Western grasslands published The Story of The Range in 1926, the picture has changed. He stated that the area of land used for grazing, excluding crop lands and part-of-the-year pastures, was about "one billion fifty-five million acres, or fifty-five per cent of the total area of this country." Through the years following, great herds of livestock spread over much of the North American continent. As a result, once-productive grasses, forbs and browse, began to reduce in numbers until they supplied only a limited amount of desirable forage for livestock consumption.

The trampling of these herds and general abuse led into the period of great dust storms and soil erosion. Remarkable changes in native vegetation occurred. Overstocking, drouth, wind erosion combined to damage millions of once-productive acres of range land. The Rocky Mountain ranges suffered through mismanagement and poor weather conditions.

During this period Federal agencies took steps toward rehabilitation of the range areas. Men trained in range management were employed. Gradually Western colleges introduced courses in range management for undergraduates to obtain scientific background to further the rehabilitation work.

As the work progressed it became evident that more extensive scientific training was necessary to obtain quantitative results. Graduate training for the doctorate in range management was requested. The Range and Forestry Department of Texas A & M College was first to offer a curriculum in range management for the granting of a doc-

torate degree. The program earned remarkable success and, in 1950, Wayne C. Cook received the first doctor's degree in Range Management in the United States. A large demand arose for students of doctorate calibre to register for the Ph.D. degree in institutions West of the Mississippi River qualified to give such a degree.

Because need dictates the direction of human effort, big needs catch our attention first. We were slow to realize that grass is the common world problem because grass has always been with us. Gradually it dawned upon us that where grasses cease to grow, debts begin to pile up. Conversely, where good grass grows abundantly, the livestock are sound and strong, and gold flows freely. As our natural abundance was wasted by drouth, overstocking and mismanagement, debts accumulated. Thus we began the work of training in reclamation. We have a long way to go before we achieve the ultimate in developing our native rangeland resources. The world watches our methods, hoping that we can lead the way to more abundant living.

Already research has called the rancher's attention to the inter-relationship of grass and water supply, the damage erosion can do to both resources. We have learned that as grasses become poorer in quality and quantity, brush takes over in some areas, poisonous plants increase, lamb and calf crops decrease, and the business of the affected area deteriorates. A 1952 advertisement in the Sheep and Goat Raiser Magazine emphasized that poor range produced $1,088 less than the same area of good grassland.

Even with the evidence compiled by conscientious researchers to prove that western range lands can be managed conservatively, with an eye to being prepared for the lean years, through the help of trained scientists, county agents and qualified field men . . . there is today too wide a gap between that which is known to be valuable and the common ranch usage. We must find a way in the science of range management to reach out to those who most need and can most profit by the results of our past and future efforts. Every range specialist must feel the urge to broaden the scope and significance of his personal contacts, as well as the will to utilize the increasing number of publication outlets available to us.

With our best combined efforts we must cultivate patience, for changing the habits of the bulwark of American rugged individualism is not a project to be speedily consummated. Even as ranch research achieves results slowly because we deal with the land and its products, sometimes years in the making, so, as we strive to awaken the rancher and livestockman to the potential of their well-managed grasslands, we must remember that here too we are dealing with nature and her deliberate processes. — *Vernon A. Young,* President, American Society of Range Management.