RANGE management has just reached one of its most important milestones—the formation of a professional society. In fact, this organization with its own printed journal represents far more than an ordinary section marker or even a township corner post. It is better compared with the setting up of a base line which will orient and guide range managers for all time.

We have been a long time in organizing the society considering that our job is concerned with half of the United States—more than 700 million acres in the West and 200 million acres or more of forest and open range in the South. It is high time range men were banding together to attain nation-wide recognition as a professional group. May we grow strong and take our rightful place with other technical groups such as ecologists, foresters, agronomists, and animal husbandmen, and with organizations of ranchers and stockmen.

Although our organization is new, the profession of range management already has a long history. This is an appropriate time to review the milestones that have been reached. Some of these are: 1) attaining control of range lands, 2) early development of principles and improved practices, 3) coordinating grazing with other land services, 4) research to develop scientific knowledge, 5) extension to disseminate research results to stockmen, 6) action programs to get good management into practice, 7) working for stability of range use, and 8) developing educational facilities to train range managers.

These accomplishments were made by practical range managers, researchers, and educators working together. This brief article does not allow space to cite all names and references for a full account. For the latest general compendium of range management information see Stoddart and Smith’s text (3), and for details on research see “The History of Western Range Research” (5). For the most complete information on the extent and condition of ranges as of 1935, see “The Western Range” (4).

RANGE LAND CONTROL

Control of land and livestock—the actual ability to regulate the time and place of grazing as well as numbers of animals—is the first step in range management. Control was well under way on privately owned and leased ranges in the Great Plains by the time of the cattle boom in the eighties. On public lands, mainly in the eleven far western States, control was an uphill fight all the way and was decades in being attained. Control of grazing is still a major problem on southern forest ranges.

Early exploratory studies by the U. S. Department of Agriculture provided the initial stimulus for attaining control on public range lands and making a start toward management throughout the West. Up to 1895, there had been botanical explorations, and agrostology and pasture studies but no outstanding work had been done on range management problems.

It is interesting to note that range managers have organized as a professional group exactly a half-century after the first exploratory range management investigations were made by such men as
MILESTONES IN RANGE MANAGEMENT

F. V. Coville, H. L. Bentley, Thomas A. Williams, and Jared G. Smith. Several of these studies were published in 1898 as bulletins of the Divisions of Agronomy, Botany, or Forestry in the U. S. Department of Agriculture.

Aggressive administration and management of forest reserves was begun by the Forest Service when transferred to the U. S. Department of Agriculture in 1905. The objective was sustained, productive range on which to build a sound grazing enterprise and to provide economic family units. Even when this milestone was passed, the bulk of public lands still lacked effective control.

Indian range lands were next. They received some attention in the Southwest as early as 1910. By 1930, supervision of grazing activities was delegated to the forestry branch of the Indian Service, and a systematic program of range management was set up to meet the specialized needs of these lands, nearly 50 million acres in area.

Part of the unreserved public domain was brought under control by the Taylor Grazing Act of 1934, after decades of range exploitation. In 1936, the Act was amended to include the entire area. Thus, the Grazing Service was born and started on the long road to good management of some 134 million acres in 10 western States.

The last remaining “free range” is in the South, where it has long been the custom for the farmer-stockman to burn the range and to graze his animals on large blocks of cut-over forest land, much of it sparsely stocked with timber. These forest ranges, however, are in large part privately owned, and it appears only a matter of time until grazing is brought under fenced control in order to allow more effective production of timber as the primary crop.

RANGE MANAGEMENT PRINCIPLES AND PRACTICES

Recognized basic principles of range management stem largely from the studies of James T. Jardine and Arthur W. Sampson on national forest ranges, beginning in 1907. Four of these principles are so well known that perhaps they are taken too much for granted: 1) proper kind of livestock, 2) proper number of livestock, 3) correct season of grazing, and 4) proper distribution of animals over the range. Jardine and Anderson’s bulletin is a monument in describing these principles and their application (2). To these four principles must be added a fifth—that of multiple use to protect other land values such as watersheds, timber, wildlife, and recreation.

The development and improvement of specific practices to apply these basic principles on each range has led past many milestones, but new vistas are ever unfolding ahead. Let us call the roll of a few outstanding procedures and practices.

1. Range surveys and management plans, inventorying range forage and resources in order to fit improved practices to the individual range unit.
2. Deferred and rotation grazing, in which a different part of the range is deferred each year in rotation until the more important palatable forage plants have made vigorous growth and have reproduced.
3. Recognition of range readiness, so as to delay grazing on seasonal ranges until the important forage plants have made sufficient growth to withstand grazing.
4. Conservative grazing, which requires a degree of stocking sufficiently moderate year in and year out to improve depleted ranges and maintain forage plant cover, litter, and soil in satisfactory condition.
5. Standards of range utilization, condition, and trend. These are earmarks and criteria to guide the range manager in determining whether the forage is properly utilized, whether the range is in good or poor condition, and whether it is improving or going down grade.
6. Better distribution of animals on the range through development of fencing, watering places, and salt grounds.
7. Range seeding, to improve the forage stand and restore run-down ranges to full productivity.
8. Control of noxious plants, insects, and predatory animals.

Every range man has his own familiar examples of applied management that have paid off. For an excellent statement on applied range management see the 1948 Yearbook of Agriculture (1).

It is one thing to develop such management practices; it is another to get them applied and follow up the benefits. The research and action programs that have brought this about make up a large part of our story from this point on.

RANGE RESEARCH

The building up of strong range research organizations has been the means of furnishing scientific information on which improved practices are based. This attainment was a long, slow process and has been fully described elsewhere (5). A great deal of fine research was done by the Forest Service, the Bureau of Plant Industry, and the State Experiment Stations through 1927. But even in 1927 there were barely 40 full-time technical range research workers in the whole country, including men in range animal husbandry and range economics.

The turning point came in 1928 with the passage of the McSweeney-McNary Forest Research Act. Under the range research authorization of this Act, Forest Service range research doubled in the next 2 years and expanded periodically to meet needs as they arose. Fundamental range studies were pushed in ecology, physiology, forage utilization, condition, and artificial reseeding. Work was stimulated on range plants, animals, watersheds, soils, wildlife, and economics. Today there are probably 200 technical men engaged in the various phases of range research throughout the country. The impact of this organized research on range management is tremendous in furnishing needed facts for action programs.

RANGE MANAGEMENT ACTION PROGRAMS

From a humble beginning on a few progressive privately owned ranches at the turn of the century, range management has made remarkable strides through the cooperative efforts of stockmen and various public agencies. But the controversy still raging over grazing capacity, range watershed protection, and public land management is ample proof that the job is far from done.

Progress in range management was slow in States with large areas of public lands because of lack of control. With this hindrance now overcome the way is clear for real management. On the national forests, since they were placed under administration in 1905, the aim has been to provide a sustained forage supply and watershed cover on these 80 million acres of usable range lands. Tangible evidence of aids to best use of the national forest ranges is found in completion of range surveys and management plans for 80 percent of the allotments. These plans and the building of 17,000 miles of fence, 5,500 miles of stock driveways, and 11,000 water developments are accomplishments of no small value to the range users. Consequent benefits accrue to some 28,500 ranchers, grazing 1,300,000 cattle and horses and 3,400,000 sheep and goats on national forest ranges, not counting calves and lambs grazed free.

The 50 million acres of Indian lands make up another sizable area of public holdings where range surveys and management plans, water developments, and several thousand miles of fence have been completed.

Since its establishment in 1934, the Grazing Service has made progress in protecting and improving grazing dis-
MILESTONES IN RANGE MANAGEMENT

Districts. Range surveys have been made on about half of the 134 million acres in the districts, and a range improvement program including more conservative grazing, water development, reseeding, and trail construction has been of real value to the 20,000 permittees with their 10 million head of livestock.

Conservation programs have given a real impetus to private range land management. The Soil Conservation Service has been especially effective with its on-the-ground farm and ranch plans within organized soil conservation districts. The report of the Chief for 1946 shows a total of nearly 41 million acres of range for which proper stocking was planned, with first-time application on 24 million acres in fiscal year 1946 alone. Range seeding was estimated to have yielded 1 million animal months of grazing. Other important practices included deferred and rotation grazing, water and fence development, and water spreading.

The inauguration of the range conservation program of the Agricultural Adjustment Administration in 1936 under the Domestic Allotment Act was a truly important step in the interest of good management on private range lands. The encouragement of better practices through incentive payments was an entirely new and effective approach. Almost 95 million acres of private ranges were under the "Grazing Land Management" practice, according to the 1947 annual report of the Chief of the Production and Marketing Administration. This acreage is all in the 11 western States and in North Dakota and Kansas. In addition, deferred grazing was applied on more than 3 million acres, and several thousand acres were seeded.

Many thousands of acres of private range land are under good management but not under any public action program. Everyone concerned with the western range can point with pride to the fact that the livestock industry using this resource is much more stable now than it was 3 years after World War I. No doubt, conservative Government loan policies are in part responsible, but the widespread appreciation and application of conservative grazing and other good management practices have played an important role. Economic studies showing the financial advantages of good management have been especially convincing to the doubters. To avoid the periodic boom-and-bust cycles of the past, range men must see to it that the lessons learned are carried through the present period of financial inflation.

OTHER LAND SERVICES

Range managers have reached other milestones in recognizing the values of range lands for watershed protection and wildlife management. With the rapidly expanding dude ranch business, even recreation is coming in for its share. Range men are largely responsible for the improvement of conditions on overstocked big game ranges, such as those supporting deer herds on the Kaibab, Modoc, and Pisgah forests.

Likewise, range men from the beginning have been alive to serious watershed protection problems all the way from the high Wasatch Plateau in Utah to the Rio Puerco and Salt Rivers in the Southwest. Perhaps even more important has been the range manager's recognition of and willingness to help overcome the unspectacular but accelerated sheet erosion by water and wind. Half of the entire western range has suffered severe or extreme forage depletion, and it is but natural to build up forage, soil, and watershed values together.

EDUCATION AND EXTENSION

Until recently there was no formal training in range management. As late as 1935, range positions were being filled
mainly by men trained in related fields, such as agronomy, animal husbandry, ecology, and forestry. This call on related sciences is good for a broad background, but there is definite need to train men specifically for our difficult range management job. We may well be proud of the many schools in the West which are turning out trained range men.

Extension work in range management, while making some progress in the past 15 years, has lagged far behind the advances in education, research, and public action programs in other fields. While several States carry on some range extension through county agents and specialists in related lines, not a single State extension range manager is shown in the 1947 list of workers in Land-Grant Colleges and Experiment Stations. This does not mean, however, that there are no trained range men in the Extension Service. The few known range men in this work are listed as agronomists, animal husbandmen, or foresters. Our Society should have something to say and do about this!

THE ROAD AHEAD

Although we have passed many milestones, we still have far to go. The outstanding tasks facing range managers may be summarized as:

1. To improve management of ranges that are not yet under organized programs and thereby receive latest and best information on forage plants, range conditions and utilization, management practices, seeding, plant control, and the like. These lands may amount to as much as one-third of the total western range area. They are an especially fertile field for work by the Extension Service, the Soil Conservation Service and the Agricultural Conservation Program of the Production and Marketing Administration.

2. To build up damaged ranges by strengthening and maintaining management on public and private ranges already under organized programs. This means getting herds down to the grazing capacity of the range, building range improvements, controlling erosion, and handling big game and other wildlife. It especially means stepping up the range seeding programs on nearly 80 million acres too seriously depleted to be restored through natural means.

3. To put southern forest ranges under control, and start management.

4. To continue and expand research to adapt range management practices to changing biological, economic, and weather conditions. Particularly urgent is fundamental research in forage plant behavior, noxious plant control, and range seeding.

5. To encourage continued progress in related fields such as, forestry, animal husbandry, wildlife, and economics.

6. To initiate an aggressive range extension program.

7. To continue to develop sound educational facilities for training range men.

8. To promote the professional welfare of range men through the American Society of Range Management, and by cooperation with similar societies in related fields.

LITERATURE CITED


