

# Range Education in the Field

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**E**DUCATION in the fields of range appreciation, range improvement and range management should be planned to reach two groups of people, as follows:

1. Those who *do not use* the range as a direct source of livelihood but who are interested or should be interested in the maintenance of this greatest of resources in the West. This group of non-users includes the city and town businessman whose profits are dependent upon the success of ranchers and farmers. Since 60 percent of American industry is based upon the transportation and processing of agricultural products, and meat and fiber processing is a large segment of industry, it is highly important that the town businessman and his family learn to appreciate grass as a great agricultural resource.

Other non-users of ranges include the taxpayer in town and country who makes a small contribution each year to support the programs of public agencies carrying programs of range research and protection. A different type of information is needed for the cigarette or cigar smoker who may be the rabbit hunter, the vacationist or traveler, who carelessly throws a lighted stub in the well-cured grass that is being kept for fall and winter range. And too, there is an army of big game hunters who believe that game animals were on the ranges first and therefore they should be given grazing priorities, with livestock being eliminated from public ranges.

We must remember that when we educate a woman we are apt to be educating a family, therefore we cannot overlook

the housewife who is uncertain whether the roast or steak she bought is from a high quality grass fat animal or from a sinewy, thinly fleshed one that has ranged over wide areas of uncertain quality of forage plants. There are the downstream fellows who are concerned with run-off from range lands, including the irrigation farmers who are vitally concerned with speed, quantity and quality of run-off, erosion and damage to their irrigation systems; the fisherman who is concerned with run-off, erosion and stream maintenance; and, in addition, there are those who live along stream bottoms which are subject to floods, and still others who are charged with the repair of flood damage.

2. The second great group who should be reached with range management information includes *those who use* the privately and publicly owned ranges directly as a source of income. They are concerned with carrying capacity, range improvement, pounds of beef produced per section and the economics of beef production on ranges. The Forest Service and the National Parks Service have done a good job in general education of the tourist, the vacationist, and the public generally in the use and protection of range and forest resources. Those stockmen who range their cattle and sheep under Forest Service or Bureau of Land Management permits are taking more interest in improving their allotments as well as their own ranches.

As information is released by Experiment Stations the Extension Services and Soil Conservation Service are challenged to carry this new information to owners

and operators of the millions of acres of privately owned range. A new philosophy of range use may be necessary in some areas as a result of recent research and the break in cattle prices. This research has shown that more pounds of beef can be produced with fewer animals and less detriment to the vegetation under moderate grazing, therefore the cattle barons of the future may be those operators who succeed in producing the most beef per acre and per cow instead of the cowman who owns the largest herd and ranges over a wide territory.

### HOW DO PEOPLE LEARN?

The non-users and the users of range lands described above include nearly everyone as a possible student of range management. In this phase of education it is most important to carry an information program among the range users since they actually manage the range and are in best position to put improvement practices into effect. During periods of high cattle population and falling prices the immediate educational program should center around returns from moderate grazing practice or efficient production. The problem is: What is moderate grazing and how to help stockmen judge range conditions under the variable production situations in the West.

Those of you who have had teaching experience know that young people learn in three ways, as follows:

1. By hearing that which is to be learned.
2. By seeing that which is to be learned.
3. By doing that which is to be learned.

We all learn in the same manner. In fact, there are *no other ways to learn*. Range education is simple. It is the arranging of situations so that people may *hear, see* or *do*, but in the field we do not have the incentives for learning of the classroom, and basically the American

rebels at being "trained", and the problem becomes more complex, more challenging.

That which a person *hears* is less apt to be learned or retained. What he *sees* may make a more vivid impression than what he has heard, and that which he *does* is rarely forgotten; it is an experience, good or bad, that stays in his memory. In carrying educational programs in the field extension workers have successfully combined demonstrations, meetings of all kinds, news stories, circulars, radio, popular bulletins, farm visits, office and telephone calls, and in some cases television is being used. The big three of all of these methods are the *demonstration, meetings* and *publicity*.

### DEMONSTRATIONS—SOMETHING TO SEE!

Fifty years ago or eleven years prior to the passage of the Smith-Lever Act establishing the Extension Service, Dr. Seaman A. Knapp proved the farm demonstration to be most effective in helping people to learn improved practices in agriculture. Since 1914 thousands of extension supervised demonstrations on farm and ranches have helped people to "see", "believe", and "go do likewise". An extension demonstration is a proven fact or practice tried by a farmer, rancher, homemaker, or youngster for his own and the neighbors' observation and benefit.

In Colorado a range demonstration program is under way. Favorably located demonstrations are designed to help ranchers estimate range conditions and show the stockmen that the application of good range management practices will be to their benefit. No effort is made in these demonstrations to duplicate the work which has been done by research conducted by the Rocky Mountain Forest and Range Experiment Station, Fort Collins, Colorado on short grass and mountain ranges. The facts discovered by

the Colorado Experiment Station and the Forest Service Station are simply being carried to stockmen through the demonstration procedure and the research workers are as much interested as the stockmen in the practical application of their research.

A basic philosophy in establishing these demonstrations can be found in a quotation from a sociology text by Kolb and Brunner, as follows:

"The naive assumption that any group of persons will fall in with any plan about which they have *not been consulted* and which has not taken the social situation into account has been proven false so often in history that its survival is one of the world's mysteries."



FIGURE 1. "We'll fence and find out," said Frank Fehling of Nathrop, Colorado, when someone wondered how steers would gain on alsike - grass meadow compared with open range.

In each area where the demonstration is being carried a committee is formed of stockmen and representatives of interested organizations and agencies. When the demonstration involves public lands

the committee is composed of stockmen as well as representatives of the public land agency and others. It is the responsibility of this committee to select the area where the demonstration is to be established and prepare the demonstration lay-out or plan. The plan includes the stocking of one fenced pasture moderately, with this rate of grazing and selection of cattle being determined by the committee (Fig. 1). An equal number of cattle of the age, type and quality as are selected for the moderate pasture are tagged, weighed and released with the herd on the open range where the usual stocking rate prevails. There can hardly be any better "leader training" in range and cattle management than to work as a member of one of these committees. When weigh day comes around the committee members are all present and they bring their neighbors. The weighing must be impartial and accurate since the outcome often determines not only the differences in grazing practices but who gets a new hat or a quart of favorite beverage for stockmen (Fig. 2).

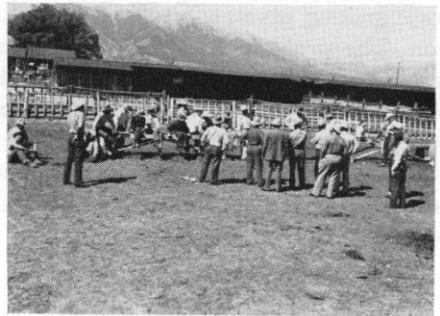


FIGURE 2. The "clinic" after weighing steers and judging range conditions at the Frank Fehling demonstration. Stockmen and representatives of 8 agencies learning to speak the same language.

Obviously, the demonstrations must be carried on over a period of years to bring in the effects of fluctuating rainfall and grazing rate on range production. In

addition to the cattle weights, records are kept on the condition of the vegetation, both inside the demonstration pasture and on the range outside. When stocking rates are established through this process for maximum vegetative response in the fenced pasture and maximum gains on the livestock, the stockmen and technicians can then have some definite observations upon which to base their judgments regarding proper stocking on nearby ranches. One of the greatest advantages of demonstrations in areas adjacent to public ranges has been the development of a willingness among stockmen and administrators of public ranges to get together on a range allotment improvement program. In at least one location in Colorado a cooperative written plan is under way—a joint effort between stockmen and agencies to improve the privately owned range as well as the publicly owned range by water development, water spreading, re-seeding, fencing, noxious plant control and new stocking plan.

Perhaps the greatest advantage of these range improvement demonstrations has been to provide a common meeting ground for range users and technicians to get together and work out their common problems. Basically, the users of the range land and the technicians have the same objective in mind but speak a different language. The demonstration is an ideal place to apply this bit of the philosophy of Franklin D. Roosevelt—"To accomplish anything worthwhile there must be a compromise between the ideal and the practical."

#### MEETINGS—A PLACE TO HEAR AND SEE

Next to the cattle auction the most attractive type of meeting for stockmen is the get-together or clinic at the demonstration or on the ranch provided the

"learned" speakers don't talk too much. Too often when we think of education we remember our experiences and the "pouring in" process of the classroom rather than the town meeting of our forefathers. We think of the lecturer who was expected to talk "about 30 minutes" and then there would be class discussion if there was any time left, and there never was. Thoughts of a schoolroom or any indoor meeting may make the stockman shudder because he knows he'll have trouble staying awake. Perhaps that is the reason why he does not show up when Dr. Blank from the College or the Department is going to talk on range management. But the real trouble may be that Dr. Blank has never taken the trouble to look up or understand the meaning of I Corinthians 14:9 in his Bible.

A few essentials of a good meeting will suffice to emphasize that because of their social values meetings are still effective in range management educational programs in spite of improved means of communication. These essentials of a good meeting may be listed as follows:

1. A committee or sizable group representative of those to be reached should plan the program, determine objectives of the meeting and assist in getting attendance.
2. The program must include subjects of vital importance and local interest to those who are to be reached.
3. Many programs at meetings are over-crowded. A well balanced and most effective program includes talks with visual aids such as slides, charts, exhibits; a panel including local stockmen who have worked on a range demonstration committee; and finally, a time for discussion or a question-and-answer period.
4. A well informed chairman who understands objectives of the meeting and how to conduct a successful meeting.

### PRINTED WORDS—TO SEE AND STUDY

The illustrated feature story in stockmen's magazines or in the ranchers' column in the local newspaper has a definite place in range education. Its greatest value is perhaps to arouse interest and create a desire for further information. The results of local demonstrations, together with experimental facts, carefully written as a news article or circular, may bring many inquiries if the name of the stockman conducting the demonstration is given or the address of the experiment station making the discovery is mentioned in the article. In case the news story brings in several inquiries to a stockman demonstrator it may be necessary that the county agent take over the job of answering because some stockmen do not have the inclination or facilities for answering letters.

The printed or mimeographed circular

carefully prepared with illustrations and with a summary of results of demonstrations is very useful in answering inquiries or as hand-outs at meetings or to office callers. Stockmen generally complain that bulletins and printed matter released by colleges or the Department of Agriculture cover too many subjects in too many words, some of which are technical and therefore difficult to understand. The printed word in the newspaper or in the farm journal is a contact that can be made at a very low cost per contact.

The ranch visit is the most expensive contact though most effective in persuading a rancher to adopt new practices. There never was a more opportune time to preach herd adjustment and range management. The combination of methods of contacts best suited for effectively reaching ranch operators with new information is perhaps the next big field of needed research in range management.



EVERY MEMBER SECURE A NEW MEMBER IN 1953