Journal of RANGE MANAGEMENT

Editorial

WHAT IS RANGE MANAGEMENT?

DONALD W. HEDRICK Professor of Range Management, Oregon State University, Corvallis.

Since our professional society has been in existence for nearly two decades it seems appropriate to critically examine and reflect upon what we mean by the term, range management. This question is prompted by the innate desire of most of us to maintain a propriety and dignity befitting our profession. In order to do this and keep in step with modern trends, many of us have identified ourselves with "range science" during the past ten years. Whenever this name change more nearly reflects our present activities it has been worthwhile. However, in this attempt to gain identity and respect the question is: Have we unconsciously short-changed our profession in applied science or technology?

I'm afraid that I've been as guilty as anyone in the attempt to impress my campus colleagues with the importance of science in range management. In this attempt I've failed to recognize that we have a responsibility just as important as the science aspect; i.e., how can we, with the help of the best scientific facts available, manipulate the forage resource for the maximum overall benefit of humanity. True, this requires a tremendous scientific understanding in the interaction of soils, plants, and animals, but one cannot effectively manipulate these resources without application of scientific findings which is basically technology.

This importance of technology and its relationship to the sciences has, for me at least, been clarified by the Yale chemist, Harold G. Cassidy, in the American Scientist, September, 1963. He wrote on the subject "The Muse and the Axiom." Members of the Range Society can take heart in his statements. For example, "Technologies unite the humanities and the sciences." He describes three activities - analytic, synthetic, and application to practice—that are carried on in the sciences, humanities, technologies, and philosophies by their practitioners. "Analytic activities are those of reporting, collecting, separating, and distinguishing. Synthetic are those of generalizing and ordering. The third activity-that which closes the circle—the activity which applies the generalizations to practice, serves as a test of their validity at the same time that it serves the uses of life. The sciences and humanities are in part characterized by the dominant role of analytic and synthetic activities; . . . the technologies by the major emphasis upon application to practice. But, in all of them, all three activities are pursued (the italics are mine): this is why they are of equal stature, and they belong in the college or university."

Aren't we short-changing our profession in limiting a definition of range management to science and art? Isn't it more appropriate in view of the developing body of knowledge at our disposal to include technology in our definition? It seems to be a normal and logical, evolutionary development to go through a series of steps in which art changes from a dominant to subordinate role. If so, aren't we entering a new phase with a greater sense of predictability in applying our scientific knowledge to our range management problems? Which means that technology is becoming more important and the art in range management less so. When viewed in this light a revision of the definition of range management may be long overdue.

To avoid the criticism of raising questions and not providing any answers I'm suggesting consideration of the following definition of range management which I've used and found suitable in teaching an introductory course: "Range management is the manipulation of the soil, plant, and animal complex used by grazing animals." This management is based on the best scientific information available on these complexes which occur largely on uncultivated land, where native plants are predominant, and where other natural resource values—watershed, forestry, wildlife, recreation, etc.may be important. With minor changes such as the substitution of arable for uncultivated, improved for native, and the deletion or addition of other land uses, this definition also fits pasture management as well. More important, perhaps, is the stress on technology which is the final test of the value of our scientific findings in obtaining better use of the range resource.