Third In A Series

Range Management's Record

A review of why range management came about, what it has accomplished and what society will need from range professionals in the future.

By Thad Box

Our record says we speak for the land. Our critics say we only support the ranching industry and that we are willing to drastically change natural systems for unworthy ends. They charge that range management has emphasized products and production, improvement over nature, and technology. They are partially correct. We provide products and services society demands. We use technology. We manipulate proudly. But they are wrong that our manipulation hides dark objectives that go against what society wants. We try to get what people need without harming land.

Range management began in response to a decline in land productivity caused by livestock grazing. It evolved as society made new demands on the land. We now have an identity crisis because we have not adjusted to what people now want. We are stuck in the past.

When Europeans first came to the USA, they brought with them a new culture, new technology, and new biological organisms. To argue the "right and wrong" of their actions is futile. It has been done. They came and they changed the land forever. Range scientists and livestock opponents have told this story of the rise of livestock industry and the decline of rangelands. Each tells the same, sad story, with a slightly different spin.

Exploitation once fit our national policy. Natural resources, whether forests, rangeland, or water resources were there for the taking. A new country needed money and people. In their zeal to conquer the wilderness and produce income for an emerging country, they abused the land. Society wanted products to enhance the lives of people. They overused their resources. Scientists began by documenting land abuse in the late 19th century. Botanists and agriculturalists assessed the results of past damage and suggested ways to correct them. The beginning of range management started as scientists responded to public concern about rangeland deterioration.

Range management developed to balance land uses with land capability. Use was excessive, ranges were overgrazed, and forests were cut. Floods and mud slides came from the mountains, covering towns and villages. Forest reserves were set aside. Public lands were used as a commons. Indian land use was steered toward white culture objectives. Dust from rangeland blew to Washington.

There was a need for tools to evaluate land potential and regulate its use. The scientific response was descriptive and practical. Guidelines for calculating carrying capacity for livestock were developed. Ways of documenting erosion, plant cover, and soil stability were determined. Scientific range management began to move from descriptive to functional with the development of the concept of ecological succession. For the first time,

managers had a scientific theory with which to assess and predict rangeland response. The teachings of Frederic Clements, and his publications on plant succession had a strong and continuing effect on our profession. Although we have moved from the Clementsian paradigm in favor of more modern ecological theory, many of our practices are still rooted in a theory we now think faulty.

The publication of Jardine and Anderson's bulletin in 1919 on the management of livestock on national forests and Sampson's paper on plant succession and grazing the same year brought together the practice and theory behind the fledgling profession of range management. Textbooks began to solidify the concepts and practices.

Research on rangelands began when the first range experiment stations were established in Texas in response to overgrazing in the 1890s. In the decades following, each new experiment station and each new research agency was established and funded because the taxpayers wanted ways to supply their wants. These ranged from safety from mudslides to more meat and wool. Gradually, a body of knowledge for the management of rangeland developed.

The first range management college courses were taught in the early 1900s. Several universities—among them Idaho, Montana, Utah State, and California—claim to have taught the first range courses. Because early courses were taught in unlikely departments, often with titles that were not descriptive, there are disputes over when the first range course was taught, where it was taught, and who taught it. Courses and curricula were developed in response to several different societal demands. Courses in forage or economics spoke to specific problems in agricultural production. Others addressed conservation needs such as soil conservation or watershed management.

Senate Document 199 "The Western Range" (1936) was the first major paper summarizing the status and condition of the American range. It was a political document issued by the Forest Service, written by Forest Service employees, in an attempt to move the public lands into the Department of Agriculture. Despite its political intent, it represents the first professional opinion by range managers about American rangelands.

Like the academic programs that produced them, range managers found themselves answering to different professional groups. Foresters, agronomists, biologists, and livestock producers all had organizations with range folks in them. No professional society spoke solely to the needs of rangelands. In 1946 Vernon Young chaired an Interagency Range Management Conference at the University of Idaho. A committee was formed to explore a separate society for range "men." The American Society of Range Management held its organizational meeting in Salt Lake City in January 1948. Its original officers consisted of four government agency employees, three academics, and one rancher.

The pioneers that formed our profession were generalists. Each was typically trained in ecology, forestry, agronomy, or animal husbandry. They were united by a common goal—improve the management of rangeland. In order to address rangeland management more effectively, new disciplines such as economics, sociology, and other social sciences were welcomed into the society.

Conflicting Views Shaped Our Profession

A number of dichotomies have haunted our profession from the beginning. Compromises necessary to satisfy the broad, diverse membership ended up with unclear and often conflicting policies.

Conflicting views about range as a use or range as a kind of land has confused us from the start. The objectives of our society, printed in the front of every journal, speak of rangeland resources, range resources, range ecosystems, range environment, soils, plants, and water. It does not mention a use. Most members agreed range was a kind of land, but some government agencies considered range a use. Their pamphlets and public relations material listed timber, wildlife, water, recreation, and range as land products. Many critics of range management think we still see range as a use.

The difference in objectives for using private and public land is another dichotomy. Private lands are usually managed for individual gain, the gain of a family, or the profit of corporate shareholders. The very fact they are privately owned suggests a return on investment. Public lands, on the other hand, are managed for the public good. Societal goals for these lands are spread over a large diversity of people with different wants and desires. No single use can be maximized. The mix is optimized to satisfy many. We claim to speak for the land regardless of ownership or use.

The poor and the wealthy want different things from rangeland. The poor want food, shelter, safety, and a chance to improve their standard of living. The rich already have these. Poor people want immediate improvement of their lot. This often means products. The rich may desire "ecological services," viewed as intangibles by the poor. Society wants ranges to be used both for immediate economic gain and potential future uses. We want to keep options for future uses open.

We disagree whether we are analysts or advocates. Some say we should only do good science. Leave policy to politicians. Others say we must advocate for sustainable landscapes. The dichotomies of our profession will remain with us. We cannot settle them here today, but we must deal with them.

Emerging Societal Needs

The nation's wants have changed. Beef and wool are no longer the most valued products. People want food

safety, "healthy" food, bottled water, and "ecological services." We struggle to adjust to that change. Our profession evolved to meet demands society made on rangelands. In our self-analysis of who we are, we must face up to what people now want.

In poor countries ranges are depleted and overused. Wants of the people center around survival. Food, water, fuel, human health, and education have higher priorities than aesthetics or maintaining endangered plants and animals. These poor cultures have responded by trying to modernize, industrialize, and externalize the effects of their industries. Range manager's role in such countries is the production of goods and services, much the same as American range managers did in the early 20th century.

By contrast, rich countries want luxury consumption of everything from food to fuels. They want to move the impact of their luxurious lifestyle to poor countries. Wants of the people in rich countries include clean water and air, freedom from pollutants, ethical treatment of animals and plants, aesthetics, open space, beauty and an "organic" diet produced elsewhere.

Four Options For The Future

Our response to societal need was adequate, and in many cases excellent, as long as goals were production of commodities or soil conservation. Our current range profession is compatible with the aspirations of poor countries. It can continue to thrive on private land in rich countries. However, most range managers live in rich countries where society does not want traditional products from rangeland. SRM evolved and organized to meet needs society wanted a hundred years ago.

We do not understand what society now wants. We make feeble attempts at choosing a sexier name we hope will make us more lovable. We refuse to believe that society in our rich countries today wants different things from the land than we are trained to provide. We can pursue several options as a profession.

First, we can resist change. We can continue to address the needs of poor countries and private landowners. We will prosper and be respected in the short run in the places where poverty rules peoples' lives. Ultimately we will go the way of production agriculture, content to be the servant of commodity groups.

A second option is to try to understand what rich societies want from rangelands and develop theory and practice to meet those needs. We have not been very good at listening, much less understanding. For instance, I have heard no serious discussion about how we would organize, what sciences we would use, or what would be our professional objectives if livestock grazing were removed from public rangelands.

By default, we may fall into a third option. We try to change society to fit our world. We "educate" the misguided that grazing is not causing irreparable harm; indeed grazing is good. Even if we are right, we are naive. We ignore the fact that we have evolved as a profession by responding to societal wants. We have no track record showing our profession has credible skills in creating wants.

The fourth option is to focus our attention on science for future conditions and needs. Let others fight political battles of competing uses. We can develop basic science that can be applied to land health whether it is a cattle ranch or a biodiversity reserve devoid of domestic animals. We remove ourselves from the trauma of conflicting uses. We become the ivory tower scientist.

Or we keep flailing around and die a slow death. Or fold our tent and slowly walk away.

But we must not die or walk away. Our cause is just. Our mission is as valid as it ever was. Only the environment in which we seek it has changed.

Author is a long-time member and past president of the Society for Range Management.

In the next issue of Rangelands, *this series will look at "Future Rangeland Uses" and "Water's Role."*