

make. They are afraid they might end up in court again—an arena the environmentalists have been so successful in. Then add the fact that the Congress, who probably will be doing what we the people want, will quit spending so many dollars. With this problem, are chances for improved range conditions are slim; so we might have to live with our existing laws, more regulations, and less funds as is now available. It is unfortunate, however, that the production of food will be the one to suffer.

I believe it is time for Congress to seriously consider old ideas with a new approach. It has been suggested in the past to Congress, to the land agencies, and to the environmentalists that we ranchers would spend our own money to improve the public lands if given an opportunity. I am sure that the private ranching operations could make most of these range improvements at a third of the cost that the government is now undertaking. We could begin immediately to improve these lands by financing many of the developments ourselves, thus saving the government millions of dollars. The plan would work on a credit down through the years on grazing fees. As I see it in the near future and in the long range, this is the only way that range improvement dollars will be available in the next 10 years. So far, efforts by the livestock industry and some members of Congress for this venture have been unsuccessful due to the opposition of the land agencies.

**It is rather ridiculous** for the federal agencies to spend millions of dollars for nonproductive efforts. A good example of

this are the 152 EIS's currently under preparation. So far, a lot of the EIS's are costing nearly a million dollars apiece. I'm sure when the American public finds this out it will not tolerate this wasteful spending. Especially when the end results will mean less food production and result in higher food costs to the consumer.

I have requested the BLM director, Frank Gregg, to make available a complete detailed report on the amount of dollars spent on these EIS's. We are spending millions of dollars for paper work only, while the ranges receive no measurable dollars for improvement. Perhaps our Western Congressional delegation should hold an oversight hearing on this problem. A hearing concerning the actions taken by not only the land agencies, but also the activities of the national Environmental Protection Agency as to how it has affected and is affecting range conditions in the West, is definitely in order.

I hope that you members of the Society for Range Management will help. The next 10 years will probably decide the density of whether we as family operators can continue in the livestock industry of tomorrow.

In conclusion I plead with you. Let's all work together, the Society for Range Management, the BLM, Forest Service, the many environmental groups, and the livestock industry for the benefit of a more productive public lands for tomorrow. Let's turn all those tractors around the other way and pull together. The results could be tremendous. ●



## Change and Challenge of the 1980's

Guy R. Martin

Proper management of rangelands is one of the highest priorities in the Department of Interior. This article will tell of the changing role of rangeland management in the 1980's and social, economic, and political aspects associated with it.

The decade of the 1980's is to be a decade of challenge and change. The change is not the effort of a few for the discomfort of many—especially those who live in the West. Result of change is molded by events that reflect new public attitudes in the outlook of the courts, in the laws that regulate the public lands, and in changing economic conditions. This Administration is committed to achieving those changes in range management that will produce a healthy vegetative resource that can support an economically viable livestock industry, a thriving base for wildlife, wild horses and burros, and proper watershed management.

John Wesley Powell, in 1878, described the public range as lands whose value consists only in the scant grasses which they spontaneously produce and that the value could only be made available by the use of water for the sustenance of livestock. Gifford Pinchot said, "The planned and orderly development and conservation of our natural resources is the first duty of the United States. It is the only form of insurance that will certainly

protect us against the disaster that lack of foresight has in the past repeatedly brought down upon nations since passed away."

During most of the 19th century, public land policy was basically one of nonfederal ownership to encourage settlement and development. Just before 1900, emphasis in public land policy began to shift towards retention of some lands in federal ownership for conservation of watersheds, preservation of natural beauty, and protection of timber lands. The shift began to increase in the early part of the 20th century with concern for wildlife and arid grazing land (Taylor Grazing Act, 1934) and recreation.

The United States Congress reinforced these changing concepts with passage of major, innovative legislation:

★ The Classification and Multiple Use Act of 1964 was a new approach to provide authority to manage the lands for recreation and other purposes.

★ The National Historic Preservation Act of 1966 requires that effects of each federal undertaking upon cultural resources be evaluated and that adverse effects be mitigated. This Act sets forth basic concern of the nation for preservation of its heritage.

★ The National Environmental Policy Act of 1969, expressing a major concern for quality of the environment, requires a detailed statement on major federal actions significantly affecting quality of human environment.

★ The Endangered Species Act of 1973 declared that all federal departments and agencies seek to conserve endangered

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and threatened species and utilize their authorities to provide suitable habitat.

★ The Federal Land Policy and Management Act of 1976, the Bureau of Land Management's Organic Act, provides that public lands be retained in federal ownership, that public land resources be inventoried, and that land use planning and management be on the basis of multiple use and sustained yield principles.

★ The Public Rangelands Improvement Act of 1978 declared that the public rangelands are producing less than their potential and established a national policy to manage, maintain, and improve condition of range so that it becomes as productive as feasible for all rangeland values. This Act is the most recent Congressional action which provides specific direction and policy to the future of public rangeland management.

The process of change is continuous, but the rate of change is not. In the field of public lands management, the rate of change is increasing exponentially.

Recently there has been a change in public attitudes. More people are concerned about the way we manage the public lands than ever before. At the same time, people have become more representative of the broad spectrum of society and geography. These people absolutely reject the concept that only commodity-type users must be concerned with the way the Bureau of Land Management administers public land, and they also reject the idea that only Westerners should have a say in what happens.

One reason this change may be more noticeable in the West is that in a real sense it has not happened here. Changes have occurred to be sure, but here there are large areas where the view of the "good life" has not changed. Pioneer values of self-reliance and independence, with close ties to land and its products, are still alive and well. This gives the Westerner a benchmark against which to measure society and the changing values. These changes are frightening to some.

Some Americans are more concerned about how we manage the wild horses than about domestic livestock grazing or even wilderness. Over 100,000 pieces of mail in the last few years attest to this.

Recognition of changing values and demands in relation to public land management for multiple purposes is implicit in planning range management for the 1980's. The future of public rangelands will depend on the adoption and implementation of sound public land laws and policies that will assure environmental quality, and, at the same time, encourage healthy economic growth.

The value of land changes over time with population increases. The highest and best use of many public land areas today is not the same as it was 50 years ago, nor will it remain static for the remaining time of the 20th century.

Economic conditions, supply and demand factors, national and regional goals all impact our objectives in managing public lands. The state of the economy has a definite influence on Federal appropriations and public willingness to invest in the management of public rangelands. At the same time, social values and desire for a productive, healthy range contribute to obtaining a commitment of user groups, conservation organizations, the Administration, the Congress to ensuring that rangeland resources are protected and enhanced. Cooperation is needed to achieve this goal.

These considerations led me to make the Department's range program one of my highest personal priorities when I took this position two years ago. I was working fertile ground, as it turned out, because the Secretary enthusiastically supported truly new initiatives each time they were advanced. A short list of what's been done is instructive about our policy:

★ In the first BLM budget (for fiscal year 1978), I advocated an increase in all range areas, which truly changed past practice. The Secretary not only supported it, but went to the President to nail it down after seeing it cut out at O.M.B. We did the same the next year. Thus, in only two years, over \$10 million were added in the Administration budget, reversing years of history which saw range funds lose out.

★ The 4-year authorization request by the Administration followed the same pattern, surpassing in its level of requested authority both previous budgets and all expectations. The receipt of this proposal in Congress provided a clear incentive on this issue because it signaled a genuine and sizeable commitment to improvement of the public range.

★ The Department early committed itself to not reacting against the court-ordered Environmental Impact Statements, but rather to using them as the best possible management tools under the circumstances. Rather than deal only with grazing, they have been developed to deal with the whole spectrum of uses and management actions. We are now firmly on a course to get them done on the court-ordered schedule. Environmental Impact Statements were an early impetus and source for funding for gathering badly needed range data.

★ We fought hard to see that the District Multiple Use Advisory Boards were spared in the overall Advisory Board cutback, and while unsuccessful, we strongly support the section in the Rangeland Act mandating them.

The above are some of the things we have done which indicate our approach to the task ahead. We are prepared to do much more.

Soon, we will be prepared to ask you to review a draft of the Rangelands Management Program. The draft is a comprehensive strategy which establishes the policies and objectives of the Department for rangeland management for the next 20 years. It establishes schedules for completion of inventory, planning, environmental statements and on-the-ground improvement work. It describes our budget, strategy for making it work.

Writing the Program has helped us understand the particular problems we face, and your full participation in reviewing it will make the process even better. Here, briefly, are the objectives identified thus far for the next 20 years.

We intend to improve vegetative condition of the range, reduce erosion and insure stability of the soils, make sure that sufficient water quantity and quality is available for all public land resource needs. We plan to minimize short-term disruption and ensure long-term stability of western livestock industry and economies of many western communities through cooperative management.

We intend to increase forage supplies for all types of animals on public lands as well as provide protection of threatened and endangered plant and animal species. Protection of habitat for fish and wildlife; management and protection of floodplains and wetlands; and protection of areas of special, natural, scenic, historical, cultural, and scientific value will be provided. Public involvement of all interested parties in planning, managing, and administering our rangeland resources is essential.

There are other new concepts and directions we are pursuing. Establishment of the Experimental Range Stewardship Program is progressing; reorganization in the Washington office of the various disparate rangeland functions into a single comprehensive unit is being developed; improvement of the quality of BLM's relationship to the range science community is beginning. We have started to identify sources of assistance to provide the techniques needed to mitigating the economic effects of needed management actions. We are also ready to deal decisively with

the problem of intermingled ownership by developing new working arrangements that will provide the best management for the overall range resource.

My hope is that these actions, more than any words or good intentions, will characterize the commitment we are bringing to the overall task of recapturing the vitality of the American range.

To succeed, we will have to put many past practices and attitudes aside as we create an alliance having a common interest in the basic rangeland resource. This alliance will require that the most constructive and tolerant elements of every involved interest must provide unprecedented levels of leadership and understanding of long-term objectives of range recovery.



## “Sistemas de Pastoreo” – ¿Superfluos y Complicados?

José S. Gutiérrez y Luis C. Fierro

Debido a la importancia de los pastizales, ya que estos constituyen la base de la ganadería extensiva en diversas zonas del mundo, es de primordial importancia el darles una utilización adecuada con el objeto de evitar su deterioro. Sin embargo, existen extensas áreas donde debido al pastoreo inmoderado o sobrepastoreo se ha reducido notablemente la productividad de los pastizales, éste ha sido el caso de la zona norte de México, considerada como la zona ganadera más importante de tipo extensivo en el País. La condición en que los colonizadores españoles encontraron a mediados del siglo XVI, los pastizales del norte de la Nueva España (hoy norte de México y Suroeste de los Estados Unidos), dio origen a una importante industria ganadera que aún persiste. El pastoreo era continuo y generalmente inmoderado, dada la abundancia de forraje y las amplias extensiones disponibles. Esta situación ocasionó serios cambios en la vegetación, particularmente en lo que a productividad se refiere.

Hoy día, el ganadero se encuentra con pastizales en condición pobre, enfrentándose a muy altos costos de producción, que lo obligan a intensificar el manejo de su rancho, para aumentar la productividad de su predio y continuar en el negocio de la ganadería. Para tal fin, deberá identificar el factor o factores que el pueda regular o modificar para aumentar su producción y eficiencia, estos factores serán la vegetación y principalmente su ganado. Dicha modificación de vegetación y ganado, será posible llevarla a cabo con la infraestructura que posea, particularmente cercos y aguajes, pudiendo de esta manera diseñar o adoptar un sistema de pastoreo, mas, ¿qué es realmente un sistema de pastoreo?, ¿será algo complicado que recomiendan los técnicos, y que tal vez resulta inútil? Empecemos pues por definir qué es un sistema de pastoreo. Se le ha definido como el control del ganado en tiempo y espacio, con el propósito de mantener o incrementar la producción forrajera y por ende la producción ganadera. Un sistema de pastoreo involucra cinco factores básicos: 1) carga animal; 2) tipo de animal; 3) época de pastoreo; 4) distribución del pastoreo; y 5) frecuencia del pastoreo.

### Las diferencias existentes entre los sistemas de pastoreo

pueden ser atribuibles a la variación de estos factores, siendo el más importante de estos la *carga animal*, ya que cualquier sistema de pastoreo funcionará mejor con una carga adecuada, ya que si la carga animal es alta, las plantas deseables perderán vigor al ser sobrepastoreadas y desaparecerán eventualmente del área, y al darse el caso de que el sobrepastoreo continúe, se originará la degradación del pastizal provocándose la erosión. Por tal motivo, no existe sistema de pastoreo que nos permita ignorar la carga animal. Por supuesto a este factor se encuentran íntimamente asociados los cuatro restantes, sobresaliendo comúnmente el factor tipo de animal. No es raro escuchar en los medios ganaderos que si bien las cabras, los ovinos o el ganado caballar son altamente destructivos, y además causantes de la destrucción de tal o cual área. En repetidas ocasiones estas afirmaciones limitan o frenan el fomento de estas especies, desgraciadamente en detrimento de la economía del País. Con esto no se trata de decir que estas especies no pueden ser destructivas, sino lo que se quiere asentar es el hecho de que *cualquier* especie, si no está debidamente *manejada* puede ser altamente destructiva, sobretodo si no se respeta la capacidad de carga del terreno en cuestión. Obviamente especies como los caprinos, ovinos y equinos, dadas sus preferencias y hábitos de comportamiento son más destructivos si no se *manejan debidamente*.

Existen diversos tipos de sistemas de pastoreo, todos ellos desarrollados con el fin de lograr una mejor utilización y distribución del pastoreo, así como de incrementar la producción del ganado, basados en el conocimiento de que la vegetación necesita un manejo adecuado, ya que el pastoreo tiene un impacto directo sobre ella, debido a la reducción del forraje, reconociendo que para mantener una cubierta densa y vigorosa de plantas forrajeras deberá dejarse suficiente follaje que permita la manufactura de reservas alimenticias y proteger las plantas durante el letargo. González (1976), indica que el potencial para el mejoramiento de la producción forrajera en el norte de México utilizando sistemas de pastoreo es del orden de un 40% a corto plazo, y de un 120% a largo plazo. Este mejoramiento en la producción forrajera, se verá reflejada en la producción ganadera, estimándose un incremento de 10% y 20% a corto y largo plazo, respectivamente. Estas estimaciones están basadas en trabajos de investigación realizados en la zona mencionada, y son clara muestra de lo que se podría incrementar la ganadería únicamente con la adopción de

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