Application of Planned Range Management in the Southwest

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This is a subject on which every cowman's livelihood depends, and furthermore, every cowman applies the management of his range a little differently than the other. This is, of course, understandable, as there are many variations in range conditions, such as location and rainfall, its size, its topography and the wide variation of growing seasons in Arizona which require different methods of management; therefore, a different plan of range management practices must be applied for each and every range.

We have heard many definitions of good range management. Inasmuch as I have here the opportunity to come up with one more, I want to add this proviso to the many definitions that we have heard. Good range management is a management procedure which results in the production of the maximum pounds of livestock on an economic and sustaining yield basis.

Practices Must Fit

I do not pretend to recommend a list of range management practices or a program that will cure all ills, as every ranch unit presents different problems. In other words, where in one situation a practice is practical and economical, it may be impractical on the neighbor's ranch. For example, my neighbor might find it practical to drill and equip a shallow well for $5,000 or $6,000, which would increase his cow herd by 25 head, but just over the ridge I couldn't afford to drill and equip a very deep one for $15,000 or $20,000 for a 25 head increase. Or it might be advantageous to practice a rotational grazing plan in one area, and over the mountain here it might take all the cowboys and forest rangers in Navajo County to make the rotation.

We can't overlook the fact that automation has practically revolutionized almost every industry except the livestock business, in which we are very limited in this respect. This has all come about on account of the high cost of labor today. Unfortunately this puts a squeeze on us, because we must still use a considerable amount of labor to work our cattle.

This paper was given by Ernest Chilson at the summer meeting of the Arizona Section of the Society, July 30, 1957, at Show Low, Arizona. Chilson is president of the Arizona Cattle Growers Association, and has been associated with ranching and the cattle business in Arizona since boyhood. His father and uncles were ranching in the Tonto country in the 1880's.

Chilson is part owner and manager of the Bar T Bar ranch near Winslow. In this paper he discusses some of the problems involved in the application of a range management program in the Southwest and considers the basic management practices that have greatest usefulness in the area.

We have many variables in this business and some we haven't been able to overcome. Up to this time at least we have not been able to forecast our weather six months or a year in advance, in fact we have trouble getting an accurate 12-hour forecast. We have been subjected to severe price fluctuations. With these variables, it is essential to design our management plans with considerable flexibility. But even the most flexible plan sometimes fails us under extreme conditions. We are all accused of over using our ranges during drought periods, and these ascensions are justified to some extent, if for no other reason than the fact that our grass and browse plants suffer through drought without any grazing.

Economic Factors

Even though most of you here realize the problems involved and the limited possibilities of meeting all these, I believe it worthwhile to give an example of the economic difficulties that confront us at a time such as last year. Last year as you know we had a serious drought and at the same time we were caught in a price-cost squeeze. We had some critical decisions to make during the year. Let's use a typical rancher who had been on the same ranch for many years. He had a short feed supply, he had a high investment in his cow herd, his cattle were under weight, even though he had a large feed bill in them. His credit was limited due to the long duration of the drought.

I believe he fully realized that if he maintained any cattle on his range he was going to reduce the carrying capacity of his range for a period of possibly a few years. He considered whether he can afford to sell his cow herd for less than one-half their normal value, fully realizing that he has spent many years in breeding and developing this herd. In making this analysis he had to consider these factors. The drought was so widespread that it was impossible to find pasture elsewhere. Even though the cattle were totally removed, something like 50 percent of his normal overhead would continue, such as property taxes, depreciation, maintenance, living expenses, and perhaps part of his management forces, etc. Then he realizes that when he restocks he will only be able to purchase less than one-half the same number with the money received from the sales. This would not be an economical unit, and he will be bringing in cattle which are not acclimated, fully realizing that for the first year or two a native cow will produce more beef than 1 1/2 cows which were brought from some other area. This is particularly true in rough country.

So in the end he had very little
Ernest Chilson (above) believes that good range management is the management procedure that results in the production of the maximum pounds of livestock on an economic and sustaining yield basis.

decision to make and probably followed a pattern such as this: He rigidly culled his herd—probably by 20 percent rather than the usual 10 percent, and he did not keep his usual 10 percent or 12 percent of replacement heifers, with the hopes that he could maintain the balance by feeding them whatever was necessary to keep them fairly thrifty.

I have tried to point out here that the best of range management plans will sometimes fail, and as a result, without a choice to do otherwise, we give our rangeland a beating but, by the same token with good management we can recover this loss in a relatively short time. Therefore, this might be a necessity in a successful operation. Many cowmen made such a decision, knowing that if they sold their cowherds, they could not find the financial aid to restock. We can’t overlook the fact that the Internal Revenue Department will not allow us to spread a profit over more than a one-year period or a loss over a two-year period. In fact we can’t make a material decision today in any business without taking a close look at the tax rulings.

I certainly don’t want to leave the impression here that I advocate grazing off a full feed supply at any time. I highly recommend conservative grazing at all times or whenever possible. In fact I am fully aware of the damages that occur with continuous over-use, especially the loss in the more palatable species, which might not decrease the carrying capacities in numbers, but most certainly would in total number of pounds produced.

Management Principles

There are certainly great advantages in good range management, and there are many practices that we must use continuously, and others that we should use whenever possible, in order to maintain or increase the production of the maximum pounds of beef or livestock.

We all realize the fact that the Southwest is and always was subject to droughts. I don’t believe that we should consider all droughts a national disaster or emergency. We have just gone through a rather serious drought whereby Federal assistance was apparently needed, and there are still portions of this county and Apache County which have not had much relief through rainfall. The cowman has realized very little from any of these drought programs, and I wonder if we should enter into them unless absolutely necessary. We want to keep our initiative to earn a decent living, and I’m not in favor of the Government guaranteeing me a profit in business or any other industry, then turning right around and paying it back in taxes.

Now what can we do with our initiative in range management here in the Southwest:

1. Conservative grazing in order to maintain or increase the most palatable species, will also allow us to ride out these periodic droughts a great deal easier. As I said before, our profits are based on pounds of beef produced, not numbers. My neighbor, Kenny Wingfield, is still fighting his horse because the yearlings off his range only weighed 800 pounds last year.

2. A uniform grazing pattern is of course very advantageous. I believe you can gauge the efficiency of an operator by seeing the uniformity of utilization, with consideration given to accessibility of water or the practicability of the development of it. Sometimes this requires considerable fencing and water developments, but it usually pays good dividends.

3. It is necessary that we carry out our range development practices and maintenance during the years in which we anticipate higher incomes, in order to take advantage of the tax write-offs—for example, tree or brush control, reseeding and taking care of your big maintenance and repair job.

4. A uniform water development plan, of course, is an essential for good distribution and maximum production. In most cases there is a practical or economical means of attaining this.

5. Keep your herd culled closely for age, quality and the weight for
age factor. I don’t believe you can pass this one up any year. In culling don’t wait for better prices next year.

6. Use a properly balanced supplemental feed for the particular range and range condition, with ample feeding facilities, and with particular consideration given to getting the herd in a thrifty condition at calving and breeding time. At home, I am certain that the increase in calf crop, the uniformity of the calves, and the early breeding of the cows much more than pay for the entire winter supplemental feed bill. The careful consideration of locating the supplemental feed bunks during the cool or winter months will aid materially in getting a uniform grazing pattern.

7. We need to better acquaint ourselves with our range plants, their characteristics, their requirements for existence and production, and their palatability.

No doubt I have omitted other range management practices which are equally as important as those I have given, but by the same token any cowman could tell you all day of the various tricks of the trade. Also, I have dealt in generalities, and I have not measured these advantages in dollars and cents, the measure that determines whether a practice can be used, but again we must make these calculations on the basis of the particular individual range.

8. Finally there is one other annual practice which I feel is a necessity, and that is the use of the assistance offered by the American Society of Range Management and the Arizona Cattle Growers Association.

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Balancing Livestock with Range Forage and Harvested Feed in South Dakota

BUD and LEO DE JONG, Kennebec, South Dakota, as told to LES ALBEE, Range Conservationist, Soil Conservation Service, Rapid City, South Dakota.

“Several serious range problems confronted us when we bought our present ranch ten years ago,” declared Bud and Leo DeJong. “The range lands had been grazed hard for a long time. The grass cover was thin and the soil had little mulch. The ground showed through the grass like a balding man’s head. We were overstocked, too, when we threw our own Angus cattle in with the Herefords we purchased with the ranch. But most serious of all was the lack of balance between our livestock numbers, range forage, and hay production,” they agreed.

Licking these problems has been a ten-year job. Balancing their livestock numbers with year-round forage and feed supplies has solved their major difficulties. Here, then, is the DeJong story.

Bud and Leo operate their 6,000-acre ranch on the south bank of the White River, 16 miles south of Kennebec, South Dakota. They moved their families from Eagle Butte to their present ranch site in 1948. Bud is the livestock man, while Leo is the grass man. They always consult one another before making important decisions on livestock and grazing management and feed production operations. This is one of the secrets of their success.

Bud and Leo DeJong have lived on ranches since boyhood. Their father, Nick DeJong, acquired a ranch in Ziebach County, South Dakota, in 1924. In 1940 Bud and Leo bought their father’s ranch, expanding and developing it during the next few years. The brothers sold this place in 1948 and bought their present ranch, located 16 miles south of Kennebec, South Dakota, on the White River.

“Next to our cattle, our chief interest is horses,” say the DeJongs. The brothers raise and train registered quarter horses in addition to operating their 6,000-acre cattle ranch.

Range Sites

The topography of the DeJong ranch varies from flat river bottoms to abruptly steep slopes and rolling uplands. Their different kinds of range land (range sites), based on kind and amount of vegetation produced in top condition, are overflow, silty, clayey, dense clay, shallow, shallow clays, and shale.

These kinds of range land may be grouped into three classes according to their soil moisture relationships. “Normal” sites with deep soils take in and store most of the rainfall they receive. Silty, clayey, and dense clay range sites fall into this class. They differ in soil texture, differ significantly in kinds of range plants, but produce about the same amount of forage.

“Runoff” sites have limitations in...