Profitable Ranching During Drought

JOHN ROYAL, Menard, Texas.

What has happened to others and to us during the recent drought years has given us a valuable lesson in how to operate a ranch, not only during drought, but in good times as well. As I look back over my twelve years' experience as a Soil Conservation District supervisor, I can see many changes that I would make in the operations on our ranch. However, the changes that I have made enabled us to survive during the past seven years, which constitute one of the worst drought periods in the history of our area. During this period we have at least made all expenses, and in some years we have even made a good profit.

Location

Our ranch is located twenty miles southeast of Menard, Texas, in what is known as part of the Hill Country, or Edwards Plateau. As I stated before, it is in the section that has been very hard hit by the drought. We are in a section that has a good deal of brush on it. The brush in this part of the Edwards Plateau is not thick enough to prevent grass growth. The principal brushy species are liveoak and shinoak. Our principal grasses are sideoats gramma, the feathery bluestems, little bluestem, buffalo grass, and curly mesquite, along with smaller amounts of Indian grass and big bluestem.

Size of Operation

We operate ten sections, and lease 1,146 acres. It is a ranch that is about six miles from north to south, and is not over two miles wide at any place. When showers are hitting in the neighborhood, we generally get in on them on some part of the ranch.

Type of Operation

We run sheep, goats, and cattle on this ranch. The last few years we have had very few cattle. We decided after the first two years that cows had no permanent place in our operation during a drought. We sold down to about twenty-five cows. Whenever we have extra grass, we take cows in for pasture.

Rancher John Royal is a member of the Board of Supervisors of the Menard Soil Conservation District, and is past president of the Association of Texas Soil Conservation Districts. In this article he tells of the management operations that brought his ranch through the drought in good physical and financial shape.

John Royal recently received the Hoblitzelle Award for the Advancement of Texas Rural Life.

Rainfall

The normal rainfall for our ranch is about twenty-six inches. The record for the last seven years is as follows:

- 1950—22.94 inches
- 1951—8.32 inches
- 1952—25.64 inches
- 1953—12.75 inches
- 1954—8.33 inches
- 1955—19.63 inches
- 1956—12.50 inches

You can see that the past seven years have been below normal in regard to rainfall. Many rains during that period have been of the storm kind, hard, with considerable run-off unless you have a cover to make effective use of it.

Methods of Operation

During my first few years as a supervisor, I slowly began to see the value of having a good cover on the land. I have found that this cover must also be of the better kinds of grasses.

I have never in my life found myself in the position that I couldn't learn a little more. When our district was first established, many like myself could see the value of a good conservation plan on our ranches, but did very little to bring this to a reality. I attribute the major part of my success to Pat Trew, our Soil Conservation Service work unit conservationist. He slowly convinced me
that a cover of grass was the greatest resource we had. We have worked together very closely for the last nine years. We have found that this technical aid has helped to make our ranch a paying operation during the drought.

Every time I get an idea on an operation, I discuss it with him. We both may add to, or take away from the idea. We operate this ranch like many other conservation ranchers do.

Our plan of operation calls for cross fencing for better distribution of grazing, and deferred grazing. All cross fencing originally planned has been completed. Our plan also called for livestock not having to travel over 3/4 of a mile to water, and this, too, has been accomplished by drilling new wells, and piping water from others.

Locating salt for better distribution of grazing has also been practiced.

We have done a great deal of brush control work on this ranch. We have chained, chopped, bulldozed, sawed and sprayed. Due to the drought, I feel that I am in no position to say which type is best. They all take proper management before and after treatment. We have found that a six month deferment before treatment, and a six month deferment the following year gives the grass a start after mechanical treatment.

When the drought began, we saw our grass rapidly disappearing. The first thing we did was to ship the cattle to Oklahoma. I never brought them back, and I learned then that you cannot operate successfully or profitably by moving livestock from place to place. I was lucky enough to sell before the prices dropped.

Shipping the cows away helped some, but we had to reduce the number of sheep also. It was after I had sold the cows and reduced the sheep numbers, that I realized no profit can be made by buying feed. You have to raise it yourself in the form of grass! I realized that I had to raise grass, and when showers are limited, you have to really manage in order to keep a grass cover.

**Our Drought Management**

First, we cut our numbers down. Second, we started deferring more. We even deferred as much as 50 percent of the ranch during the growing season. We would rotate the pastures so as to give all at least 60 days rest during the year. This was not as good as the six months deferment, but it did give the grass a rest, and when rains came, it had more vigor.

During the six months deferment, we found that seed was produced, forage was increased, and many of the better grasses began to come back. I particularly like the deferment to extend up to frost in order to get the benefit of fall rains, and to allow grass seed to mature.

Since the drought began, we have had to cut down on expenses, and we have found that these conservation practices fit right in with this plan. When you defer, you cut down the number of pastures you have to work, and that cuts down on your labor.

We have found by deferment and rotation of pastures, that the livestock does much better, and labor costs are cut down. Application of this program has resulted in a more vigorous vegetation, and one that is more responsive to rains.

We all know an animal that gets down is hard to bring back. The same applies to grass.

What does all this mean as far as making money is concerned? We do know that feed, labor, and operational expenses are the big items which determine whether you make anything for yourself. In cutting down our numbers, we found that we had heavier lambs and calves, and the wool pounds were increased. With the increased vegetation due to deferment and rotation, we had less feed to buy.

By stocking according to how much grass we produce, we find that we are able to make a little profit for ourselves. Each fall we take inventory as to the amount of grass we have produced, and keep the livestock that this grass will carry. We always plan on feeding the cows cottonseed cake, and we buy it at the most opportune time.

As for our sheep, we wait and see how dry it is before we buy feed for them. Generally we do not plan to feed them unless forced to do so.

I mentioned in the beginning that we also run Angora goats. We found that in the management of
our brush we had to have goats. We got back in the goat business two years ago, and find them very profitable in the proper use of our brush. It is my personal opinion that you cannot put goats in a pasture and expect them to eat only brush, as they are also heavy grass eaters. I therefore figure my stocking numbers just like they were sheep.

Look to the Future

In summing up our operations on this ranch, I would say that we are here not only to make a good living, but also to prepare for the future when our children take over. My wife and I are trying to train the children to be good conservationists in order that they may appreciate the value of our land. When they do this, they will find that if they take care of the land, it will take care of them. If we can convince the children, who in the future will be taking our places, that grass is the greatest resource Texas has, we will have done our job.

More Income for the Polacca Stockgrowers Through Good Range Management

POLACCA STOCKGROWERS ASSOCIATION, Polacca, Arizona, a Hopi Indian Livestock Association; and CHARLES PITRAT, Range Conservationist, Hopi Indian Agency, Keams Canyon, Arizona.

We are proud of the progress we have made in this business of livestock production. In the last sixteen years the condition of our range and the quality of livestock has increased tremendously. We are probably most impressed, since it affects our pocketbooks, by the fact that from a lesser number of livestock we are producing four times as many units of livestock products now as we did before 1940.

Description of Area

The Hopi grazing area is contained within District Six of the Hopi Reservation, which is located approximately 75 miles north of both Holbrook and Winslow, Arizona. District Six comprises 631,194 acres of which approximately 12,000 acres are dry farmland. The northern topography is characterized by three principal projections of the black mesa, which makes up from east to west, the first, second and third mesas. These three mesas are the principal subdivisions of the Hopi community. The breaks between the

This article tells the story of 16 years of range improvement on the Hopi grazing area in Arizona. Planned range management has been the principal tool through which range improvement has been obtained. Along with improvement of the range has come increased production of livestock products, although numbers of animals have been reduced. The greater production of livestock products has meant increased income for the Polacca Stockgrowers Association.

The principal types of vegetation in District Six of the Hopi Reservation are in order of predominance, grassland, saltbush, piñon-juniper, sagebrush, greasewood, and browse-shrubs. Galleta (Hilaria jamesii), blue grama (Bouteloua graminis), alkali sacaton (Sporobolus airoides), and other dropseeds (Sporobolus spp.) are the major grasses. Indian rice-grass (Oryzopsis hymenoides), black grama (Bouteloua eriopoda), needle-and-thread grass (Stipa comata), comprise the remnants of the climax vegetation considered important in range management goals. The principal species of shrubs and browse are four-winged saltbush (Atriplex canescens), greasewood (Sarcobatus vermiculatus), Mormon tea (Ephedra spp.), sagebrush (Artemesia tridentata), and rabbitbrush (Chrysothamnus spp.).

Livestock

Domestic livestock came into the “Hopi Country” along with the limits of this season being from May 16 to October 4.

All the soils are very susceptible to erosion unless well protected by vegetation. Sandy soils formed from the Mesa Verde formation comprise the major portion, while shale soils formed from the Man- cos shale formation are next in importance. The strong southwesternly winds do excessive damage to the sandy soil when it is exposed, while the torrential summer rains may cut deep gullies through the shale soils during one summer rainfall.

Vegetation

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