

# Personal Experiences in Grazing Improvement in Chihuahua

ARMANDO R. RAYNAL

*Cattleman, Union Ganadera Regional de Chihuahua, Mexico*

Until recently grazing practices, routine in Southwestern United States, have not been used in the state of Chihuahua, Mexico. A climatic difference makes our conditions different and years of revolution have greatly retarded technology in Mexican animal husbandry. A definite advancement was not made until the 1950's.

My first experience seeking to break the established routine of Hereford ranching with nothing but nature for a background was in 1945, when after reading an American magazine on the use of salt to regulate meal intake, I tried it on 60 selected cows. Simultaneously it was tried by other cattlemen in the State.

The one great difference between conditions in Chihuahua and the Southwestern United States lies in the fact that while some spring moisture is general in the Southwest, the normal condition in Chihuahua is to have no spring moisture. This makes a tremendous difference in all the operations. Our grasses as a rule, are very strong from July through October which comprises the period of rain and relatively good moisture in the soil. Our pasture conditions are, therefore, characterized by highly superior grass these 4 months of the year followed by 4 months of gradually diminishing nutritional value. One thing is in our favor, however, compared to the American standard cycle. We by no means have the winter storms that occur in the United States. This lack of storms makes it cheaper to winter our cattle but lack of moisture in the spring gives us a bad taste of drought

in the months of March, April, May and June.

Under these conditions cattle cannot prosper conveniently on 4 months of good grass and 8 months of poor grass. With cottonseed meal and salt supplementation the breeding herd operates rather successfully but it is almost impossible to produce fleshy cattle for slaughter during the 4 months of drought mentioned.

Here it occurred to me that grazing winter wheat would be the solution to the 8 months period of cattle losing weight. I knew that lack of moisture in the spring would nullify all possibilities of making a grain crop so I would have to gamble on making a profit on the grazing alone. My first experience with this type of operation came in the winter of 1956-57 and since then I have been using it every year with relatively good success. The procedure followed was: plowing and planting between August 1 and 31; grazing, December 1 to March 15; rest, March 15 to April 15; and additional grazing, April 15 to May 31 or until the wheat died out. On the first grazing period of 105 days recently weaned calves have consistently gained 150 pounds.

I had another experience in breaking the old routine this last spring, 1961. One great problem in grazing lies in the fact that where a mixture of palatable and non-palatable grasses is carried, a general utilization of the range very easily produces a further deterioration of the palatable species because in trying to get cattle to utilize the non-palatable

grasses the good ones are overgrazed. From this it is evident that a supplementation is needed in order to induce the cattle to eat the unpalatable grasses in winter and spring. In March 1961, 500 yearling heifers were placed on a reserved 400-acre pasture of mixed grasses on a hillside with abundant scrub oak. The pasture was supplemented with a daily feed mixture of 100 grams of salt, 100 grams of cottonseed meal, 300 grams of ground oat grain per head. Until March 31 the heifers lost weight and ate but very little of the more palatable grasses. On April 1 the daily supplementation was modified to 150 grams of salt, 150 grams of cottonseed meal, 300 grams of ground oat grain, 150,000 units of vitamin A, 100 mg. of copper sulphate and 20 mg. of diethylstilbestrol per head per day. The results from April 1 to 20 were unbelievable. The heifers demolished everything that was eatable on the pasture and grazed the unpalatable grasses with the same intensity as the palatable ones. The leaves of the scrub oaks to the height the cattle could graze were removed as if pruned by hand. On April 21 the heifers had to be moved out because the degree of utilization was getting dangerously heavy. They had eaten with a devouring appetite.

Still another grazing experience was obtained also in the spring of 1961 on a 400-acre pasture heavily covered with Alfombrilla, *Drymaria arenarioides*, the poisonous weed that has killed thousands of cattle in the central part of Chihuahua. The basis of the layout was to induce a natural trend to reduce the stand of alfombrilla and an improvement of the palatable grasses. Two things were obvious, protect the good grasses on their critical period, i.e., rest the pasture entirely from July through October, and hurt if possible the alfombrilla by overgrazing in a critical period of

its growth. This is during the first growth in spring, March and April. It is on this phase that the poisonous weed starts its growth. The principle was that if the weed was overgrazed when it started growth, a heifer would not eat the half pound of green matter required to obtain toxicity. Twelve hundred heifers were on the pasture April 5 through the 30th. Eight were lost but results with the alfombrilla were encouraging. A partial kill

seems to have been accomplished. The more tender plants, perhaps the 1960 crop, seem to have died. On this basis, if a kill is achieved on the plants started the previous year and, if as it is claimed, alfombrilla is a short lived perennial, the treatment should control this poisonous weed in 3 to 4 years. This experience should be combined with the previous one.

At the present a last experiment is being developed. This

one consists of feeding 2-year-old heifers Morea liquid feed after they had been grazed on wheat as yearlings. Reports on gains cannot be given yet but from visual observation these heifers are doing very well. A check showed 27-month old heifers weighing 880 pounds. The importance of using Morea liquid feed comes from the availability of molasses. It is the only feedstuff available in surplus in the Country.