

The Way to Greater Profits: Deferred Grazing

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THERE IS NO better crop for conservation of soil and water than native range in good or excellent condition.

To obtain the maximum ground cover and forage production on native range, the plants must have the opportunity to grow ungrazed for a time in order that seed may be produced, plant food storage in the root systems increased and the general health and vigor of the plants improved.

The experience with wind and drought conditions during the past three years in parts of Wyoming, and the recent flood conditions in Texas emphasize the old axiom that soil, like freedom, is not appreciated until it is endangered.

The tremendous drain on soil and plant resources goes on without much thought given to restoring the balance of nature until suddenly the weather changes and dry winds sap the moisture and start soil moving, or heavy rains cut channels in the unprotected landscape and the cry goes out "We are losing our soil—won't someone do something?"

Do It With Pastures

Fortunately, many progressive ranchers have been doing something all the time, and it is on their pastures that the dry wind or the flood has little bad effect. With plenty of grass to protect their soil and produce livestock feed, they weather these adverse conditions without much concern for their continued existence.

Deferred grazing, or the resting of a pasture from grazing during the growing season, coupled with moderate use, is the most effective, easily applied and least costly means of arriving at complete soil protection and high production of forage on native pastures.

A comparison of summer and winter pastures on many ranches where these pastures have been grazed at the same time of year for many years illustrates this point. The summer pasture has little mulch of dead grass leaves on the ground even though grazing may not have been severe. The individual plants are spindly, with much bare area between and there are very few seedling plants coming in to replace those old plants that die out each year.

In contrast, the winter pasture that has been moderately grazed has vigorous, healthy plants with little or no bare ground between them, and there

is a good covering of mulch of dead grass leaves on the ground.

Leaf Mulch Important

This leaf mulch is a very important factor in control of soil erosion from wind and water, and provides a sponge to absorb rainfall and keep the soil surface porous and receptive to water intake. The insulating effect of mulch has been proven, also. Summer soil temperatures under mulch are much lower than in bare ground. Mulch is also conducive to bacterial growth in the soil which adds to soil fertility.

The question that might now be asked is "How can I obtain these good conditions, that I see on my winter pasture, on the pastures that I must graze in the spring and summer?"

The answer is in having enough pasture divisions so that seasonal grazing may be rotated and the season of use of pastures changed each year. It is far better for the soil, and the plants growing on it, if a pasture is grazed intensively for a short period of time than if it were grazed with a few stock all summer.

Short Grazing Periods

A large number of stock in a small pasture will use the forage throughout the pasture more uniformly. When the proper degree of use is realized, then take the stock off and put them on another pasture. Let the grazed pasture rest and grow for the rest of the summer.

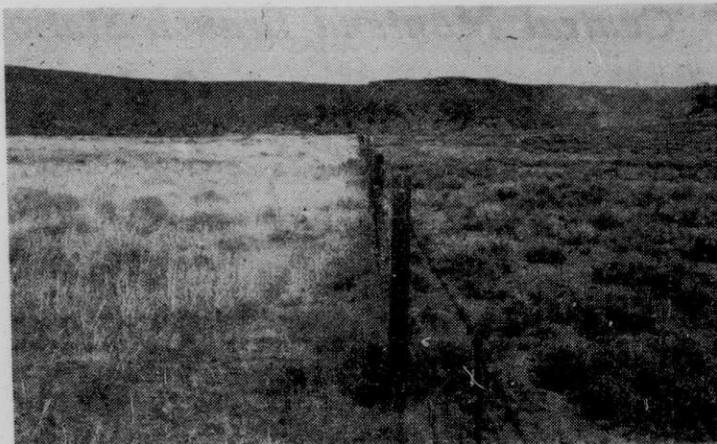
In contrast, summer-long grazing keeps only the choicest plants grazed down and allows the less palatable weedy types to grow unmolested. Such summer-long grazing over many years on the same pasture results in predominance of the kinds of plants that the stock won't eat, and a sharp decline in forage production results.

One of the reasons continuous grazing is hard on plant growth is shown in research results from clipping the top growth one too many times during the growing period. Each time the top is clipped, the roots stop growth for a period of several days.

A series of clippings, made periodically through the summer, prevented all root growth. Unclipped plants had roots which weighed eight times as much as the roots from clipped plants in these experiments.

Poor Root Growth

Reduced root production is reflected in poor development of the grass plants.



This picture shows good and poor range conditions with only a fence between. This rangeland is in the same rainfall belt and on the same range site as the previous pictures. (SCS photos)

Thus, continuous grazing prevents roots from growing, and the plants are weakened. Even on single clippings, as might occur with short-time grazing, the growing top cannot be reduced more than half without adversely affecting the functioning of the root system and the plant as a whole.

In the low-rainfall areas of Wyoming, moisture is the primary factor limiting natural plant growth. You cannot expect with 10 to 14 inches of annual rainfall to produce the volume of forage that would be common to an area having 20 to 24 inches of annual rainfall.

Grazing management, on the other hand, is the factor that determines what kinds of plants will grow on a native pasture from the large number that grow in the area. Continuous summer grazing, as mentioned before, will result in decline of the higher-producing, more palatable perennial plants and increase in the woody, less palatable and less productive weedy species.

Summer Rest

Summer rest from grazing reverses this trend, and favors the more productive and more desirable forage plants. Having several pasture divisions, and resting each pasture from summer grazing in turn, provides the means for improving the forage composition and production on each.

Profit on natural grazing land is more closely related to forage production than to livestock numbers. The same total gross gain in weight may be put on 50 steers or 100 steers under a given pasture condition. But the greatest net profit will be realized from the 50 steers because there will be less overhead expense to raise and care for them.

Also, the better finish on the 50 head will result in higher selling price for each pound of gain. Adverse conditions

could cause the rancher to sell back some of the 100 head on a low market in order to save the remainder, with not much chance of good weight gains on even the few he saved.

Hold for Gain

The same conditions would probably cause the rancher with the 50 head to sell few, if any, but he could save the greater percentage for a more favorable market and still realize a fair gain in weight on each.

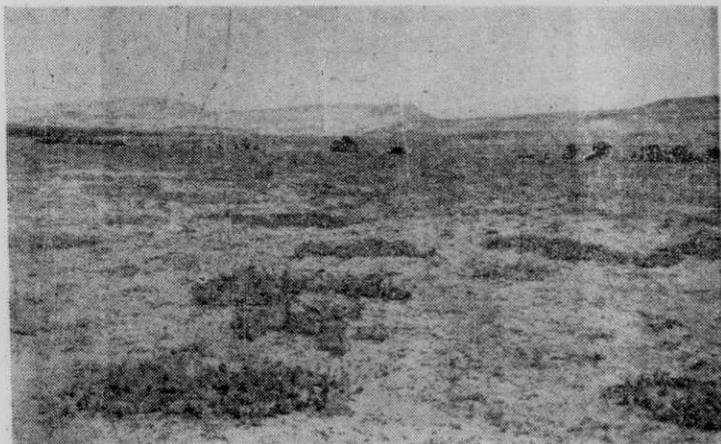
When these conditions cause forced sales in the breeding herd, then the rancher can only conclude that he has more stock than he can economically handle. Drought and winter storms are natural conditions in the plains country, and should be accepted and provided for, rather than being considered as a freak of weather.

First Step to Profits

Making the decision to try summer rest on a few pastures is the first step to greater profits from more forage production. The most favorable results from this method of pasture management are usually obtained in years of normal or better rainfall.

Response of the desirable grasses is quicker during a good year, and when a dry year comes the good results of healthier, more vigorous grass and higher production are ready to go to work to protect the soil and provide forage for a balanced livestock operation.

Soil is the rancher's bank. It won't stand too many promissory notes. The time to prepare for a drought is before it happens. Soil Conservation Districts throughout Wyoming are ready to help combat effects of abnormal years with technical advice and services of the Soil Conservation Service. They advise ranchers to take only half the grass, so the half they leave can pay dividends.



Which pasture is yours? Both pictures taken the same year, in the same rainfall belt, and on the same range site. The pasture with only cactus growing has



been severely overgrazed for many years, and is in poor condition. The one in good condition has been rested during the growing season.