Rotation of Deferred Grazing

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Highlight

Deferred grazing is good for the range resource. It benefits the livestock, wildlife, and watershed quality and dependability. It makes the countryside look better and enhances recreation. It reduces costs of livestock production. If deferred grazing is good for one pasture, then rotation of deferred grazing is good for a number of pastures over a period of years.

Resting the range once in a while from the beginning of growth until key forage plants have matured, or until vegetative reproduction is completed, has proven to be economically beneficial and biologically sound. This is Deferred Grazing. If Deferred Grazing is understood, then Rotation of Deferred Grazing should be understood easily. It is merely the application of Deferred Grazing to all, or some, of the grazing units of a ranch or allotment with a portion being treated each year. If Deferred Grazing is beneficial to a single pasture, then Rotation of Deferred Grazing is beneficial to a number of pastures over a period of years.

Across the range country rotation of Deferred Grazing is known by a variety of names. These include: Deferred-Rotation Grazing; Rotated Deferred Grazing; Rotation-Deferred Grazing; Rest-Rotation Grazing, and probably others. Basically, they all stand for the same thing. These various names for the same thing have been troublesome. Special connotations have been added with the result that in the minds of individuals, each name stands for something slightly different. Attention is diverted away fom the basic principles involved.

Commonly, it is thought that the word "rotation" refers to moving the livestock in and out of pastures periodically as is the case with "rotation grazing" on irrigated pastures. In Rotation of Deferred Grazing, the word "'rotation" refers to a rotation of *deferred grazing* among various pastures over a period of years. Moving livestock from one pasture to another is involved obviously.

These named systems of forage management do exist in range terminology. It behooves each person in range work to sharpen his understanding of the principles involved and of the situations to which they apply. This will improve personal effectiveness. It will bolster the adoption of sound forage management. In time, range terminology may be improved.

It is imperative to dispel any misunderstanding or concept that rotation of deferred grazing, or whatever it is called, is some sort of highly complex, razzle-dazzle juggling of livestock and pastures that is neither practical nor effective. Properly applied, rotation of deferred grazing is practical and highly beneficial, both economically and biologically. It can be complex under certain conditions but this can be true also with most ranching operations including haying, marketing, and animal husbandry.

Definitions

In the Glossary of Range Terms published by the American Society of Range Management, this system of forage management is called "Deferred Rotation Grazing." It is defined as: Discontinuance of grazing in various parts of a range in succeeding years, allowing each part to rest successively during the growing season to permit seed production, establishment of seedlings, or restoration of plant vigor. Two, but usually three or more, separate units are required. Control is usually insured by unit fencing, but may be obtained by camp unit herding."

In the practice standards of the Soil Conservation Service, it is called Rotation-Deferred Grazing and defined as: "Grazing under a system where one or more range units are rested at planned intervals throughout the growing season of key plants, and generally no unit is grazed more than half of any growing season or at the same time (of year) in successive years."

A simplified definition which does not also contain specifications is "A system for rotating deferred grazing among several range pastures or grazing units over a period of years in a planned sequence." The name "rotation of deferred grazing" is simple, too, and clearly states the principle involved.

Objectives

The objectives of rotation of deferred grazing include: (1) To apply Deferred Grazing to a number of pastures or grazing units over a period of years in order to allow the key forage species occasionally to complete a full growth cycle uninterrupted by grazing; (2) Improve uniformity of utilization in a number of grazing units; and, (3) at the same time, judiciously manage the livestock and range in other (non-deferred) pastures of the ranching enterprise. These in turn will maintain or improve plant cover and vigor for soil, water, and plant conservation and for optimum, stable forage production.

Where It Applies

Rotation of deferred grazing applies wherever deferred grazing is beneficial and practical. In terms of kind of range in the Pacific Northwest, this includes all upland range sites and grazed woodland sites and most bottomland sites which are grazed during the growing season. This is true irrespective of range condition class PROVIDED that some desirable perennial vegetation exists in the stand to benefit from the deferment. It does not apply to range reserved only for fall or winter grazing where key forage plants are allowed to mature each year. Also, on certain bottomland sites the forage becomes practically unusable when allowed to mature without being grazed, for example, saltgrass.

In terms of range facilities, rotation of deferred grazing applies where there is adequate stockwater within each pasture; where the range has been subdivided into pastures so that deferment does not involve too large a segment of the operating unit; and where sufficient forage is available for each season of grazing, particularly in the spring, to permit delayed grazing on the portion being deferred.

Principle

It is important to note that this system of forage management does NOT propose non-use of the forage on the deferred or rested area. Rather, it provides for harvesting the entire forage crop every year. Harvesting the deferred areas is merely postponed until after the key forage plants have matured. This can be very important from an economic standpoint. Non-use for a year or more may be desirable, however, to allow a crop of grass seedlings to become established or for some other logical reason which normally must be determined on-site.

Number of Pastures

Spring-Fall Range—Normally, at least three pastures or grazing units are needed to rotate deferred grazing on an area of range used in the spring and again in the fall of the same year. This situation exists where special summer pasture, range or a summer-allotment permit provides the forage during the summer months. Within one year on the spring-fall range, the first pasture is grazed during early spring and the remainder of the forage crop is harvested that fall. The second pasture is grazed during late spring only and the crop is fully harvested to Safe Use during this time. The third pasture is reserved for fall grazing and, therefore, is the pasture that is deferred.

More than one pasture to provide forage needed for the early spring grazing season has proven to be practical and effective. In this case, more than three pastures are needed.

Experience has shown that the pasture deferred one year should be grazed during the early spring the following year, if practical. It accomplishes several things: It helps clean up the weathered forage that commonly accumulates when native forage is grazed after maturity. This helps with the utilization pattern in subsequent years. It provides roughage (weathered forage) along with the washy spring growth for improved nutrition and animal health. It also sets up a sequence that helps one figure out how to rotate the deferred grazing uniformly among all the pastures over a period of years and helps avoid over-treating some pastures and not treating others.

Summer Range—Two pastures or grazing units are enough for rotating deferred grazing on an area of range or native meadow adapted for summer grazing. The first pasture is grazed during early summer. The second pasture is grazed in late summer or fall after the major forage species have matured. This pattern of use should be alternated in successive years. More than two summer pastures can be used effectively in sequence in this manner.

Range in Summerfallow-Wheat Units—Range fenced in with areas of cropland used to grow dryland grain in alternate years normally is grazed in a system that provides for deferred grazing every other year. The range is not grazed during the growing season of the year that a grain crop is grown on adjacent cropland. It is grazed during the growing season the following year when the cropland is fallow. Alternate-year deferment is ideal for maintenance or improvement of the range forage PROVIDED that safe degree of use on key forage species is observed.

In this situation it is generally best to divide the range area that will be grazed during a single spring-summer season into several pastures. This provides for moving the livestock to fresh forage occasionally during the spring-summer season. It also helps avoid grazing that portion

of the range continuously from spring turn-out until after the grain is harvested, i.e. the full growing season.

Sufficient suitable late spring and summer forage commonly is a limiting factor on wheat-livestock ranches. Management which maintains optimum production of good quality forage is as economically important to this type of ranching operation as it is to a livestock ranch.

Type of Operation—Ranches running two or more separate herds, such as a registered herd, a heifer herd, or a steer herd, in addition to a cow-calf herd may need a group of pastures for each herd and a system for rotating deferred grazing for each group of pastures.

Needed Facilities

In order to rotate deferred grazing, it is essential that an adequate supply of stockwater be provided in each pasture for the number of grazing animals that will be there at any one time. This may require additional developments, storage facilities or water hauling.

Fences or stock barriers are needed for control of cattle and where sheep are grazed without herding. New fences, fence relocation or fence removal may be required for best results.

Subdividing the range into pastures should involve a minimum of fence costs needed to achieve practical and economically beneficial forage management. Careful study of proposed fence locations is important. Building the fences one-at-a-time, so to speak, meanwhile watching their effects on grazing efficiency by annual utilization checks, is a practical consideration.

Additional forage from seedings, pastures, or from improved distribution of grazing within existing range units commonly may be required for getting started in a system for rotating deferred grazing.

Frequency of Deferment

Generally speaking, most range sites in the Pacific Northwest should be given a rest during the growing season once every three to five years, depending upon the range conditions. Sometimes it is most desirable to rest the same range two or three growing seasons in succession to allow seedling establishment or increased vigor. The final decision on frequency should be based on the needs of the range and limitations of working out a practical system for each ranch or allotment.

Safe Use

No system of grazing will be effective unless SAFE USE of key forage species is observed. SAFE USE alone will maintain or improve the range no matter what system is used to attain it. Deferred grazing and its rotation over all the range in a planned sequence merely speeds up the process of range improvement and makes it easier to obtain satisfactory grazing distribution.

The risk of overuse, both too close and for too long a time, in the grazing unit(s) used first in the spring requires special attention when planning and practicing this system of forage management. Overuse during the spring season is especially detrimental to the livestock as well as to the soil and plant community. Normally, overuse can be avoided by shortening the grazing period in spring-grazed units to half or less-than-half of what the units could be grazed later on in the season when a full crop of forage would be available.

Moving the livestock too many times can be detrimental to the animal gains. Some moves to fresh forage are beneficial according to ranchers practicing rotation of deferred grazing. This is true particularly when the forage is green. The manner in which the livestock are moved probably contributes about as much to the favorable or adverse results obtained as does the number of moves. Gates strategically located in fences where stock will drift through naturally will help. Moving small bunches at a time rather than a general roundup also has been pointed out as a successful procedure. Opening the gates and drifting small bunches takes more time but gets the job done more effectively.

Benefits

Some of the benefits that result when Rotation of Deferred Grazing is properly applied are:

1. The important forage plants are given due consideration regarding their needs for optimum production just as consideration is given to the livestock and their needs. Restored grasslands contribute greatly to wildlife, rural beauty, and recreation and, at the same time, reduce silting of streams, lakes and reservoirs and improve the quality and dependability of watersheds.

2. More intensive grazing for shorter periods of time reduces selective grazing of certain forage plants and promotes a more uniform pattern of use—better grazing efficiency—within a pasture or range unit. This may contribute to reducing the cost of producing livestock products.

3. It results in an increased and more dependable forage supply for livestock and game.