An Approach to Cooperative Range Management

WAYNE J. CLOWARD and DERREL S. FULWIDER
District Forest Ranger, Humboldt National Forest, U. S. Forest Service, Paradise Valley, Nevada and District Range Manager, Pyramid Grazing District, Bureau of Land Management, Winnemucca, Nevada

There are many acres of sick land throughout the western states—lands in critical condition upon which many livestock people are depending for their livelihood and for the future of their children and children's children.

One of these areas is in northern Humboldt County, Paradise Valley, so named by the early settlers, because of the vast acreage of perennial "grass waving from hill to hill," is the hub of ranch activities in this part of Nevada. The Santa Rosa Division of the Humboldt National Forest and the adjacent lands administered by the Pyramid District Grazing Office of the Bureau of Land Management comprise the seasonal ranges necessary to the year-round livestock operations in this locality.

The history of use of these ranges is similar to many other comparable regions throughout the West: early settlement, rapid development of livestock industry and influx of many nomad grazing herds. These nomad herds, lacking a base of operations, stayed on the ranges as long as weather permitted. This use coupled with the grazing herds of the bona fide rancher and settler-together with game herds increasing under protection by law, rapidly damaged or denuded much of the grassland area of Paradise Valley.

Some of the lesser damaged areas have and are responding to regulated use initiated through stockmen participating in Federal management programs. Other areas, almost completely devastated early in the century, are still carrying too many livestock for too long a period to provide for recovery and reestablishment of the perennial forage species.

The Paradise C & H allotment on the forest and the adjacent Paradise Unit on the Bureau of Land Management lands is one of those areas which had not responded to ordinary good management practices. Flash floods, soil and vegetation losses, decrease in perennial grasses and the spread of Halogeton, sagebrush and other undesirable plants were still progressing.

In order to reverse the downward trend in soil and forage condition and insure a continuous long range supply of clear water and usable forage, it was apparent that it was necessary to adjust the use to the available forage or increase the forage to meet the grazing demands and watershed requirements or both.

The range trend was still downward. Therefore, adjustments in use appeared necessary. The topography of the higher country where appropriate ordinary management practices are in effect is too steep and rough for reseeding. The adjacent BLM lands are level, deep soiled and very adaptable to reseeding. These lands had been nearly denuded of palatable forage over the years and the grazing capacity was estimated to be 20 acres or more per AUM. Sagebrush and Halogeton had invaded this area in considerable quantities.

The irrigated meadows on the ranches were producing more than enough hay for their annual livestock needs, in comparison to range forage production.

After various separate and joint investigations, the Forest Service, the BLM and the permittees got together and analyzed the condition of the ranges, the job to be done, and the economic effects of initiating special management practices. The result was a signed agreement which committed the two agencies and the permittees to pool their resources, reaching toward a common objective of range rehabilitation and stabilization of the livestock industry and tax structure of the valley.

The agreement provided for combining Forest and BLM lands into a broad grazing allotment in the following manner: Approximately 12,000 acres of lower reseedable BLM land was set up as Unit I. A two and one-half mile strip of unreseedable BLM lands between Unit I and the fenced forest boundary was set up as Unit II. This comprised approximately 15,000 acres. The high country within the forest boundary totalling 21,000 usable acres became Unit III.

The Forest Service adjusted the opening date in Unit III to absorb the spring grazing load formerly carried on the BLM Unit I and II until the reseeded area in Unit I was ready for grazing.

The agreement further provides that after the seedings become established, no increase will be allowed in livestock numbers but instead, two weeks less use will be allowed on the national forest and the AUMs involved will be absorbed by the increased grazing capacity on Unit I. Any further adjustments will be worked out
cooperatively with the three parties involved.

Since the permittees need the period from April 1 to September 1 for hay production on the meadows, it is necessary for the cattle to be on the public lands throughout this period. The permittees agreed to take the cattle off the public lands and put them on their cutover hay meadows about September 1.

The reseeding is very successful at the time of this publication and checks indicate that the grazing capacity in Unit I will be increased from seven to nine times. Control fences are being constructed as rapidly as funds are available to provide for rotation and deferment on those parts of the Units requiring further remedial measures.

Prior to the next grazing season, the permits will be rewritten to coincide with the estimated proper period of use for each Unit. The opening dates on each unit will be flexible to insure proper use at the time of range readiness depending on seasonal fluctuations in forage production.

Units I, II and III plus the cutover hay lands will be used in that order with each unit to be grazed only to the extent considered proper. Each unit will be managed by the agency having jurisdiction over the land in close working relationship with the other agency and with the permittees. Specific annual management will be determined by conditions on the ground.

By this action, it is planned to accomplish the objectives of reducing the use of the high mountain areas to provide for reestablishment of desirable forage species and soil stabilization, stop the spread of Halogeton, replace sagebrush with grass and put worn-out grazing land into full production through reseeding, and to eventually provide a more dependable long range supply of forage and water for the livestock grower.

Ultimate success of the whole program now depends on future cooperation in management of the area in order to maintain benefits being received and insure the stability of the rehabilitated range.

Accomplishment to date has been with fullest cooperation of the agencies and permittees involved. It is working here and it is believed there are many other areas where such cooperative planning and action will work as well.

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An Australian Grass in Texas

RICHARD D. BURR

Range Conservationist, Bureau of Land Management, Lander, Wyoming

Silky bluestem (Andropogon sericeus R. Br.), a subtropical grass of major importance on certain Australian ranges, is encountered more and more frequently on Texas grasslands. It has appeared, with but few exceptions, on Texas pastures through the accidental importation of its seed with those of other grasses, usually rhodesgrass (Chloris gayana). At present collections and field observations by personnel of the Soil Conservation Service have established occurrence of the Australian grass in 20 counties in South Texas with the northern limit of its range in Bexar, Medina, Comal and Guadalupe counties (Fig. 1).

This grass was not reported in the first edition of "Manual of the Grasses of the United States" by Hitchcock (1935). In the revised edition (Hitchcock, 1951) it is reported as "spontaneous on roadside banks, Cameron County, Texas." Swallen (1950) says of the grass "It has been cultivated at experiment stations and occurs along roadsides in South Texas."

The spread of silky bluestem, or Queensland bluegrass as it is known in Australia (Hartley et al., 1942), should excite interest. It is highly regarded as a forage grass in its native country as indicated by White (1934):

"Bluegrass has an exceptionally high reputation as a fodder among pastoralists. It is usually one of the earliest grasses to shoot in response to spring and early summer rains, but it is not particularly drought resistant. It makes one of the best grass hays possible and as it produces an abundance of seed it is worthy of study by the agrostologist and plant breeder."

Breakwell (1915, 1923) stated that reasonable rainfall would produce nine months of highly palatable grazing and the grass would recover quickly from use. He commented that the grass stood heavy trampling, made good hay and a good seed crop. McTaggart (1936) and Roe (1940) refer to silky bluestem as one of the better grasses.

Silky bluestem is highly variable in vegetative characters. Smooth, bright-green or dull-blue plants, with but a ring of silky hairs at the nodes, may intermingle with specimens on which the white hairs of the foliage almost obscure the color of the leaves and sheaths (Fig. 2). Little variation occurs on the seed heads. All are covered densely with silky white hairs which contrast with the deep brown awns of the fertile florets. White (1934) comments on the large number of distinguishable forms of the species in its native habitat.