DR. HALL

January 4

Reference is made to your memo of December 29.

Cronemiller and I have jointly set 2 p.m. tomorrow, January 5, for this conference with Supervisor Brennais and Mr. Woodbury regarding the pine range program.

M. W. TALBOT

Copies sent Cronemiller and Woodbury
Pine Ranges

January 5, 1939

Forest Supervisor
Sarasota, Florida

Dear Mr. Bernoas:

In accordance with your request to Talbot some time ago, we are enclosing a graph showing the weights of the cattle in the Burgess Spring Experimental Range during the past three seasons: 1936, 1937 and 1938.

This range, grazed by cattle, is located in cut-over ponderosa and Jeffrey pine. Most of the feed on the area consists of grasses and herbs. <i>Juniperus drupacea</i>, the dominant grass, makes up 21 percent of the total forage. <i>Artemisia hirsuta</i> (10 percent) and <i>Coreopsis</i> sp. (5 percent) are also important. <i>Poecilia velutina</i> (13 percent) is the dominant broadleaf herb, but is relatively poor feed. <i>Juniperus californica</i> (6 percent) is probably the most valuable broadleaf species. <i>Poolea fruticosa</i> (only 2 percent) is the only shrub of high forage value.

Weights taken at approximately 2-week intervals during the past three years show that in each year the livestock stopped gaining in weight sometime in the latter part of September — in 1936 on approximately September 15, in 1937 around September 27, and in 1938 again about September 15. Note-worthy also is the fact that the daily gains in weight dropped gradually from the first weighing to the end of the season. In other words, the experimental herd was not placed on the area soon enough in the spring in any of the three years to show when gains in weight might have started following the start of forage growth, and therefore, from the standpoint of animal weights, the beginning of the grazing season could not be determined although the closing date is pretty well indicated.

It should be noted that in 1936 there were 15, and in 1937 there were 16, head of cattle on the area (557 acres), whereas in 1938 there were 20, or twice as many. Utilization at the end of the grazing season in 1936 and 1937 was moderate, but in 1938 the range was distinctly overgrazed. In the first two years the failure of the cattle to gain after September 15 and 27 respectively was apparently due to the reduced quality of the remaining forage, which in amount appeared sufficient to carry the cattle a few weeks longer without overgrazing. In 1938 most of the feed was consumed by September 16, and no doubt both the shortage of the feed and its quality...
determined the date when the livestock finally stopped gaining in weight. The first two years' data point to the probability that the quality of the forage may be an important factor in determining the end of the grazing season, at least from the standpoint of animal weights.

In the interpretation of these data, three points should be kept in mind:

(1) That we do not have comparable data yet for sage flats and meadows, which are commonly included in most eastside allotments.

(2) That the figures shed considerable light on the end of the grazing season on that area, as reflected by animal weights, but do not aid in arriving at the beginning date.

(3) That these trends in livestock weights during the three years comprise only one of the two important considerations influencing the opening and closing dates of the grazing season for any range type. Information is not yet available on the second consideration, namely, whether or not a desirable vegetative cover can be maintained under conservative use for any grazing season that may be designated.

Very sincerely yours,

H. I. KOTOK
Director

By
Acting

Enclosure