TO : E. J. Woolfolk
FROM : M. J. Reed

SUBJECT: Research Program Harvey Valley Allotment

The week of July 18-22 marked the middle of the grazing season on the Harvey Valley allotment. During this week all of the cattle were rounded up, the weigh sample weighed, and the cattle moved to new units. I was present and in addition to other duties assisted in the roundup one day and took the cattle weights on the 21st.

The roundup started on the 18th. Animals in unit 2 from the Cone Mountain and western part of Harvey Mountain areas were dumped for practical purposes into unit 1 as they were collected. However, any designated weigh cattle were moved and held in the small pastures at Dixie Springs. Cattle from the Ashurst area and the eastern part of Harvey Mountain were dumped into unit 1, with the exception of designated weigh animals which were moved to Dixie Springs. Rounding up through the 20th was required to get a majority of the animals. Some cleanup of unit 2 still remained at that time. The weigh sample of cattle was shrunken overnight on the 20th for 1/4 hours and weighed the morning on the 21st.

According to the management plant, 100 head of cattle were scheduled to remain the last half of the season in unit 2. The other 200 head from unit 2 and 200 head from unit 1 were scheduled to spend the remainder of the season in unit 1. Ranger Alberico and I examined as much as we could of range unit 2 the evening of the 18th. Because of extremely dry conditions this season and scanty forage, the cattle had spread well out into the timbered areas and grazed a considerably larger part than normal of unit 2. The dry conditions also were being reflected in lowering water supplies in all units, including Dixie Springs. As previously discussed with you and as jointly agreed by Alberico and myself, the decision was made to move all cattle out of range unit 2. The unit could have carried the scheduled 100 head for an additional short period but it could not have carried them throughout the entire last half of the season without seriously sacrificing condition of the cattle. Had they remained in the unit, a second roundup by the Roneys before the end of the season would have been required which would have been an unwarranted demand on the permittee.

After weighing, the diamond-shaped, shiny metal-tagged group was moved to unit 5 on the 22nd along with the dry Hereford heifers. All 74 heifers were not available at that time but were to be moved into the unit within the next few days to make a total of about 104 head in unit 5. All of the
remaining cattle, approximately 1,000 head, and including the blue-round, ear-tagged group, were scheduled to be moved into unit 4. Some of the cattle, from the eastern part of unit 2, except the weigh cattle, went into this unit as they were rounded up during the period July 18-20. After weighing, the blue tagged group was turned into unit 1. These and the other cattle in unit 1 were scheduled to go into unit 4 the early part of the week of the 25th. Mr. Roney said that soon after the moves were completed he would send a further record of stocking and use on the units.

Several items are clear from this season's experience. In drought conditions like this season, as many of the units as necessary, and all if needed, should be grazed in order to carry the permitted cattle. Such provision should be recognized by all parties concerned regardless of the scheduled management plan. Secondly, due to the layout of the allotment and the available facilities, it is necessary and desirable in rounding-up to dump cattle in neighboring units which are being grazed or which are scheduled for grazing. This practicality may lead to a greater number of cattle in a particular unit for a short period than originally scheduled. This necessity should also be recognized by all concerned as a practical aspect of the management of the allotment.

These on-the-ground considerations point up the need for written guidelines of management that take into account emergency situations such as drought and the physical facilities available for handling the cattle, particularly in rounding-up and in holding. I am not suggesting changes in the plan nor in the facilities, but rather realistic recognition of the practical aspects of the administering of the allotment. It would be desirable if these and similar items could be discussed, agreed upon and recognized by all concerned. They should be made a part of the written plan for managing the unit. It would be well, sometime after Rader reports in September, that such a discussion be held. Items agreed upon could be made part of the cooperative agreement between the Region and the Station that was proposed at our earlier meeting this spring.

Extra copies of this memorandum are attached if you care to send them to the Ranger, the Lassen National Forest and the Region.

Attachments

Cc: RO
Peter
U. S. Forest Research Center
Susanville, California

Attention: Mr. H. L. Hormay

Gentlemen:

Attached for your information are copies of the Ruby Springs-Moon Hill allotment maps. It should be noted that in the acreages shown on the carrying capacity map only public domain acres are included.

In Field A we anticipate that we will reseed possibly 600 acres to crested wheatgrass during the next two years. This acreage, however, will be protected by temporary fence until ready for use. We plan to spray Field B during the spring of 1962.

It is planned that this allotment will be included in a detailed watershed plan and any recommendations that you make will be included in the plan.

Very truly yours,

Warren K. Sandau
Acting District Manager

Attachments
August 3, 1960

A. L. Hormay
305 Hall Street
Susanville, California

Dear Gus:

This will acknowledge your letter of July 23. It came when I was away on a short field trip.

I am sorry you feel depressed over your prospects in the new assignment which you describe and which I knew about in a general way from my discussions with Keith Arnold when I saw him in Honolulu in May. I know Keith thinks the new assignment for you is intended for your best interests as well as those of the Forest Service.

We all regard your work highly on rest-rotation grazing and, in fact, we recommended and the Department awarded you superior service for it. As I understand it, you would still be working part of the time on gaining acceptance and application of the new grazing concept on a wide front and in addition do range research perhaps on another problem. I guess we all feel you have more good ideas and original research yet to give and we want to see you have the chance to do it.

My very best wishes to you.

Sincerely,

V. L. Harper
Assistant Chief
Dear Joe,

We have completed the forage utilization survey in units one and two. Enclosed is a map of the approximate transect line locations and the number of sampling points taken in each vegetative type. Doug and I split up and ran separate lines which enabled us to complete the job much faster than expected. If you think we need any additional lines add them to the map and return it to me.

Elwin Roney was in today. He said that he thought the feed in unit four would be gone by about next Friday. The cattle will go into unit five for the rest of the season. We will run the forage utilization survey in four as soon as the cattle are moved.

Have you outlined the study plan for the clipping study yet? If so, send it to me at the Bogard Ranger Station. Doug and I will be there next week compiling the data sheets from the range condition and trend transects. I will be on annual leave August 8 and 9. Going to get a new car, I hope.

Sincerely

Dave
Forage Utilization Survey
Harvey Valley Grazing Allotment

Number of sampling points in each unit per vegetative type.

<table>
<thead>
<tr>
<th>Vegetative Type</th>
<th>Unit no. 1</th>
<th>Unit no. 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sage type</td>
<td>219</td>
<td>100</td>
</tr>
<tr>
<td>Timber type</td>
<td>108</td>
<td>474</td>
</tr>
<tr>
<td>Meadow type*</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td><strong>total</strong></td>
<td><strong>377</strong></td>
<td><strong>604</strong></td>
</tr>
</tbody>
</table>

* Includes wet and dry meadows, hair sedge, bunchgrass range.
STANDARDS USED FOR UTILIZATION STUDY

1. Sample points were spaced 100' apart (fenced distance) along the transects. In order to sample seven, nine or eleven transects, the end were placed at 10' intervals. Circles recorded were marked on the data sheets.

2. Stubble height was measured to the closest 1/8". The largest initial minimum and the maximum kernels were measured. Anything smaller was ignored.

3. The sample area consisted of a circle with a 50 inch radius from the sample point. The condition (i.e. grazed or ungrazed) of the closest plant of each species was recorded. If the closest plant was ungrazed, the stubble height was taken from the next closest grazed plant. If there was no grazed plant of a particular species within the circle, the stubble height in the next closest grazed plant was noted. This was continued until the circle was completely grazed.

4. If.primary point was too difficult to follow, other points were taken throughout the area, etc.
HARVEY VALLEY GRAZING ALLOTMENT
FORAGE UTILIZATION SURVEY - 1960

SAMPLING STANDARDS USED FOR LIVESTOCK FORAGE UTILIZATION

1. Sample Points: sampling points are located at 150 foot intervals along a paced transect line. On short transect lines (1/4 mile or less) the sampling points are located at 75 foot intervals in order to obtain an adequate sample of the forage species.

2. Sample Area: the sample area is a circle with a 50 inch radius from the sampling point.

3. Vegetative Sampling: The closest forage species to the sampling point, within the sample plot, was observed and its condition, grazed or ungrazed, was recorded on the data sheet. A plant was considered grazed if 50% or more of the crown area had been utilized by livestock. A plant with a basal area of less than one square inch was not included in the sample.

4. Stubble Height: the height of the stubbles on grazed plants was measured and recorded to the nearest one-half inch. If the closest plant was ungrazed, the stubble of the next closest grazed plant was recorded. If there were no grazed plants within the sample plot the stubble of the closest plant that was grazed encountered along the transect line was recorded.
Dave Dunaway and Doug Houston

August 8, 1960

E. J. Woolfolk

Harvey Valley Range Allotment

I was glad to have your note of August 4 relating to the status of the season's work. You fellows have accomplished a great deal this summer and are highly commended for the effort you have exerted.

As to the utilization survey, it might be well if you would add enough transects in the meadow type in units 1 and 2 to bring the total number of observations to at least 100 in each unit. The numbers of observations by your count now stand at 50 and 30 respectively. This means adding enough transect lines to get 50 additional points in unit 1 and 70 additional in unit 2 as a very minimum. Mert has the impression that use on the extreme eastern end of unit 2 might warrant the location of one long transect or two, which will come somewhere east of transects 8 and 13 in that unit. This probably would be on a south or southeast facing slope and farther east in unit 2 than any transect placed to date. These are the only suggestions concerning the follow-up on the utilization survey already completed.

The write-up of standards followed in the survey might be added to or clarified on a few points. At an earlier date I spoke of classing all plants that had 50 percent or more of the herbage above the basal area removed. Anything with less than 50 percent use was to be considered ungrazed. At a later date I believe Mert suggested a record of those grazed less than 50 percent and designation of such measurements with a minus sign on the form. Plants with 50 percent or more use were to have a plus sign and, of course, the ungrazed plants would have been designated differently than either of these. It isn't clear which system was used. You perhaps should clarify this point in the instructions. Also the standards write-up should contain a list of species observed by types or by type and unit if the species differed between units for any given type. How were the stubbles measured? Closest shoot estimated greatest height of all stubble or estimated common height? This probably should be clarified in the standards write-up.

I presume that in unit 1 at least some transect line was run in reseeded areas. These records should probably be designated so that they could be separated from the natural types or large unit in any unit.
The herbage production study has not yet been outlined and probably will not be in time for you fellows to put it in on the ground. Instead I would prefer that you conduct the utilization survey in unit 4 as you have in units 1 and 2 after you have increased the samples in the meadow type in units 1 and 2. The survey in 4 can be made at or about the time the cattle are moved out of that unit.

You, of course, have a good deal of compilation work which can be done anytime that you do not have field work to do. I hope that the cattle will be able to remain in unit 4 beyond the 12th but this decision is up to the ranger. It seems unlikely at this writing that anyone will be up to see you before Doug leaves on the 26th. I am sure that you will get along all right if you continue with the work outlined herein.

EJWoolfolk:mm
Job with administration?\\n
Reduction groups, develop improvements in the system to make it more practical and efficient, develop procedures for use by ranchers and administrators. I'm approaching the results of management, giving advice on setting up and maintaining groups on specific allotments and grazing and developing means of getting the basic information needed for interim rent-refund groups. Even here at Harvey Valley would be the best place to get those informations and to train people.

I'd appreciate a word from you whether there is any possibility of a position like this in admin...
I'm at the con certs now.

One of the things I have to decide in the near near future is whether to sell my house in Sunderland or not. This depends on when I'll be working and for whom.

Please write me in Sunderland
325 Holl St. If a change one would be arranged for the beginning of next fiscal year, I would have time to get some of my affairs in order.

Very sincerely,

[Signature]

Even the scrambling. I'm into sort of daze.
In order to further the application throughout the West of results from range research, Mr. A. L. Hormay of the Pacific Southwest Station has been reassigned to a position which allows him to spend approximately half of his time in range extension work. The other half of his time will be devoted to research, primarily in the refinement of the rest-rotation system of grazing management and its adaptation to different range types and conditions.

Mr. Hormay, then, is available to the western regions for consultation on national forest range problems and their solutions, including recommendation of practices for range improvement, assistance in establishing the rest-rotation or other grazing systems on allotments, and evaluating results of specific grazing systems. We believe this is a particularly good opportunity for you to obtain some help in the establishment and management of demonstration allotments.

In order to facilitate scheduling of Hormay's visits during the balance of C.Y. 1960, requests for his assistance should be made directly to the Pacific Southwest Station as soon as possible. Beginning in C.Y. 1961, requests should be made through the Washington office to allow full consideration of nationwide needs and equitable distribution of Hormay's time. Considerable latitude will be allowed so that the demands and desires of the regions can be met in furthering the range management effort.

cc: Pacific Southwest Station
Office Memorandum • UNITED STATES GOVERNMENT

TO: Pacific Southwest Station
   Berkeley, California

FROM: J. Herbert Stone, Regional Forester, By:

SUBJECT: Range

Reference is made to Ed Cliff's letter of August 24 which outlines Hormay's reassignment.

We are very pleased to learn of Mr. Hormay's availability to work with western regions on range extension work. We feel that he is ideally suited to such an assignment and will be a great help to all western regions.

We would like for Mr. Hormay to spend the week of October 10 through the 14th in Region 6. We would probably spend one day on the Starkey Experimental Range at La Grande, Oregon and one day on the Flagtail allotment on the Malheur Forest with the rest of the time available on other ranges and range problems in eastern Oregon. We hope the suggested time is acceptable to Mr. Hormay; if not, we will welcome his suggestions for other time between September 1 and late October. However, our Division of Range Management travel schedule is fairly tight from now until October 10.

cc: Chief
     PNW Exp. Sta.
     Garrison (La Grande)
J. Herbert Stone, Regional Forester, R-6

Keith Arnold, Director, By

Range Management and Wildlife Habitat Research

The period October 10-14 for which you requested Hormay's services is entirely satisfactory. Hormay's schedule is clear and he can be at Starky or other appointed place at the suggested time.

As soon as your plans have been completed we would appreciate receiving a schedule of the entire period Hormay is to spend with your people.

cc: ALHormay