

~~E. G. S. [unclear]~~

*[Handwritten initials]*

4200

4200  
September 2, 1959

Mr. James Linne  
Bureau of Land Management  
California Fruit Building  
Fourth and J Streets  
Sacramento, California

Dear Jim:

Following are some suggestions I have on the management problem on the Adobe Flat summer cattle range (north of Bishop), which you, Jimmy Garner and Tommy Stewart and I visited on June 10. Although we covered only a limited portion of the range I believe I saw enough of it to give me a pretty good idea of its condition and possibilities of improvement.

As you know, the main species in the overstory cover on the range is big sagebrush (*Artemisia tridentata*). This cover is also sprinkled lightly with rabbitbrush (*Chrysothamnus* sp), Bitterbrush (*Purshia tridentata*), Mormon tea (*Ephedra* sp) and in places pinon pine (*Pinus cembroides* var *parryana*). (See photo attached). The understory - at least this year when we were there - consisted mainly of perennial bunchgrasses, rice grass (*Oryzopsis hymenoides*) and needle-grass (*Stipa* spp, including *S. speciosa*).

Most of the grazing capacity of the range appears to be provided by the bunchgrasses. Furthermore, the density and yield of these grasses appears to be considerably below potential. There is little doubt that grazing capacity could be increased appreciably by intensifying grazing management and controlling sagebrush.

The answer to your question of whether or not rest-rotation is suited to Adobe Flat type ranges is, yes. I'm quite sure it would work very well there. The specific form of rest-rotation I would recommend for Adobe Flat is one consisting of 5 units and providing two full seasons of rest for seedling establishment.

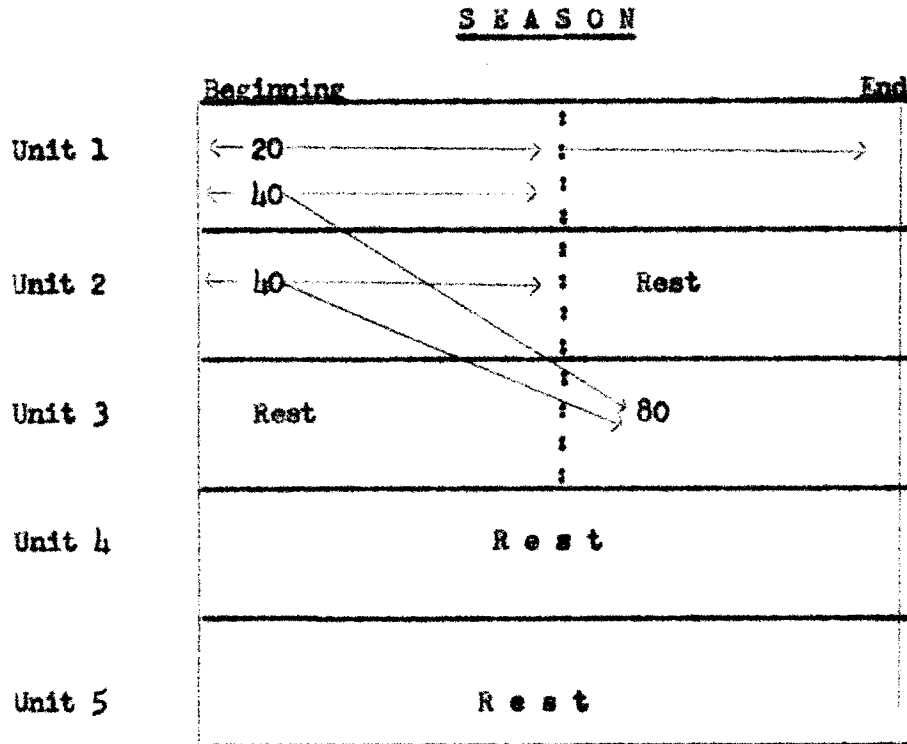
The grazing schedule for any one unit in this plan reads as follows:

<u>Year</u>	<u>Treatment</u>	<u>Purpose</u>
1.	A. Graze fully first half of season and lightly the second half.	Livestock production.
2.	B. Graze moderately first half of season and rest the second half.	Livestock production and restore plant vigor.

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<u>Year</u>	<u>Treatment</u>	<u>Purpose</u>
3.	C. Rest first half of season and graze fully second half.	Seed production, trampling seed into soil, and livestock production.
4.	D. Rest season-long.	Seedling establishment.
5.	E. Rest season-long.	Seedling establishment.

This design calls for placing all the cattle grazed on the range into two units at the beginning of the season and shifting eighty percent of them into a third unit close to midseason at time of seed ripening or thereafter. If it is assumed that 100 animal units are grazed on the range the placement and shifting of cattle among units would be as follows:



This plan is the same as the one used at Harvey Valley, except the 2nd and 5th year treatments used at Harvey Valley have been changed about - thus providing two years of rest for seedling establishment. I believe this is needed on this drier range.

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Such a system is designed not only to maintain the range but to improve it at the maximum rate permitted by soil conditions and weather. In your planning you may find a way clear to apply rest-rotation grazing on Adobe Flat. If so strive for fence control of units because this will bring most positive and quickest reactions over the entire range.

Control of sagebrush should be planned along with any satisfactory system of grazing management because it is suppressing grass yields greatly. I assume control with 2-4-D rather than fire would be the best bet because the standing dead shrubs would tend to minimize soil erosion while the grass stand thickened and finally provided the soil the protection needed.

The range of course should be properly stocked (or at least not overstocked) before an attempt is made to apply a new system. A picture of present capacity and an estimate of the capacity expected at the end of 15 or 20 years will provide a guide to the amount of range improvements and cultural work that can be justified on the range.

You indicated that probably the next two years would be devoted to planning the development and management of the Adobe Flat range. If you find you can apply a rest-rotation grazing plan and I can be of further help, please let me know. I want to tell you again how much I enjoyed the visit to Adobe Flat and associating with you, Jimmy Garner and Tommy Stewart. I hope you'll excuse the late date of this report.

Best of luck!

Sincerely,

A. L. HORMAY  
Center Leader

Attached.

CC: EJ WOOLFOLK  
R. DENIO - RO

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A view of the Bureau of Land Management  
Adobe Flat summer cattle range north of Bishop.  
Note the almost entire lack of grasses or forbes  
in the shrub inter-spaces in this area. Scene  
is near a sheep driveway. ALH-No. 2051, June 10, 1959

Office Memorandum • UNITED STATES GOVERNMENT

TO : A. L. BORMAY, SERC

4200  
DATE: September 28, 1959

FROM : E. J. WOOLFOLK

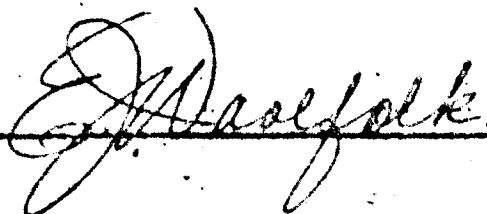
SUBJECT: RANGE MANAGEMENT AND WILDLIFE HABITAT RESEARCH

I have just seen your letter of September 23 to Dyksterhuis and the abstract of the paper which you expect to present at the Range Society meeting next February in Portland.

This abstract and the review of Harvey Valley which we made last week with the Colorado stockmen reemphasizes a point about which we have talked many times. This is the need for concrete data to back up your statements concerning rest-rotation grazing. To make a worthwhile presentation at Portland and to thoroughly sell visiting groups on the principles of rest-rotation grazing it is essential that you get more information from the experiment into your presentations. The time has long passed when we can go strictly on your observations and ideas concerning what has happened.

In preparing your paper for the Portland meeting you should bear in mind the need to process it the same as any manuscript destined for publication. This means complete review in the division, in the editor's office, and by the director. I must insist that you support this paper with good, sound vegetation and livestock data which I know you have, if you expect to get it approved for the Portland meeting. I know you have this information and can prepare it in time if you start now. This may seem a pretty harsh attitude but I have heard expressions of the need for information to back up statements concerning Harvey Valley from both forest and regional office personnel many times. You have a tight schedule in view of the forthcoming detail to the Washington Office but a compilation of the kind of information that I want to see will serve several purposes. You need this information for the paper you are to prepare, for the annual report material I have requested, and for your verbal presentations to visiting groups. If you don't have this information in usable form you will have to sit down and dig it out yourself.

You should plan to have at least a rough draft of your paper for the Range meeting in this office by Christmastime. As we discussed the other day, the deadline on material for the annual report is November 1 in the editor's office. Your write-up should be in here not later than the 26th of October. We haven't yet heard from the Washington Office about your publication detail there but it can be expected anytime.

  
E. J. Woolfolk