

~~Reg DeNio~~
SUPERVISOR, LASSEN NATIONAL FOREST

4200
October 1, 1959

E. J. WOOLFOLK, CHF. DIV. RANGE MANGT. RES.

RANGE MANAGEMENT AND WILDLIFE HABITAT RESEARCH

Dear Bunky:

You will recall our conversation of September 24 concerning the field day planned for Harvey Valley next year and the possibility of eventually increasing the stocking on this allotment.

I would be very reluctant to recommend an increase in stocking, or to even be a party to such a recommendation, based on our experience to date and the meager data on improvement in range condition which I have seen from Harvey Valley. Undoubtedly some improvement has occurred but I haven't yet seen any solid, reliable data to back it up. Before and after pictures and opinions don't count. The Harvey Valley test-demonstration is now known regionally and nationally, therefore, any change in management must be right and we've got to have good solid reasons for making changes. You well realize this I'm sure. I rather expect Gus to propose some change in stocking or management before next grazing season. Such proposals at least in my view, should be opposed until supporting data have been gathered, analyzed, and interpreted and until the range has recovered from the 1956 and 1959 droughts.

On the subject of the 1960 field day, I agree that a good deal of planning and the assignment of someone to organize and carry it through will be necessary. After discussing this with our Director, I am prepared to volunteer for this assignment. If you concur and will so advise, I will start preliminary planning. This, of course, concerns only the program. The date, publicity, and general plan I think should rest with the Forest and the Advisory Board.

As we have talked before, a field day properly handled, can largely take care of the visitor load for an entire summer. This, of course, is advisable from the standpoint of time spent at all levels.

~~E. Woolfolk, mm~~
Any comments you may have on either of the subjects touched herein will be appreciated. A copy of this memo is going to Reg DeNio for his information and any comment he may wish to offer.

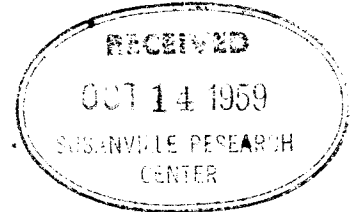
cc: Reg DeNio

file
Office Memorandum • UNITED STATES GOVERNMENT

TO : A. L. Hormay, SRC

L200
DATE: October 12, 1959

FROM : M. J. Reed

*Berkeley*SUBJECT: *IBM cattle weights Harvey Valley,*
~~Range Management & Wildlife Habitat Research~~

This is to call attention to the uniform coding system for classes of cattle.

You will recall in an earlier memorandum of June 16, I proposed one coding system. After further discussion with Bob Miller and Bill O'regan this has been changed. The reason is to provide a more meaningful system and one that will permit expansion. This new system is given on page 16 of my write-up on the proposed IBM cattle weight record for SJER, a copy of which was sent to you for your information and review.

I thought I should call this change to your attention. I would be glad to have any comment you might care to make both on the coding of the classes of cattle as well as on other items. In your case this change probably does not have any significance at this time. However, when finances permit use of the IBM equipment again, it would be well to code your cattle classes by the standard system. At that time the class codes for the animal weights that have already been processed could be changed by IBM gang-punching.

I hope sometime in the near future we can consider working ^{out} with an IBM system adapted to the Harvey Valley cattle.

Oct 19/59
Mert
Mert! I couldn't follow
all the detail closely. Am afraid I
can't offer any wish while suggestions.
Along with you, however, I hope we
can work up an IBM system for
the Harvey Valley cattle this winter
Gus

FOREST SERVICE, REGION 5, SAN FRANCISCO 11, CALIFORNIA

Office Memorandum • UNITED STATES GOVERNMENT

TO : PACIFIC SOUTHWEST FOREST & RANGE EXPERIMENT
STATIONDATE: 4200 (2210)
October 15, 1959

FROM : RANGE & WILDLIFE MANAGEMENT

SUBJECT: RANGE MANAGEMENT AND WILDLIFE HABITAT RESEARCH
(Harvey Valley Demonstration Allotment)

OCT 16 1959

Reference is made to your October 1, memorandum to Supervisor Parker concerning the field day planned for Harvey Valley next year and the possibility of eventually increasing the stocking on this allotment.

I am very much in agreement with your thoughts in regard to any increase in the present stocking rate on the Harvey Valley Allotment. While I am sure the overall trend in range conditions is upward, the significance of this trend in terms of additional stocking has not as yet been determined to my satisfaction. Certainly we all feel confident that an increased stocking rate is in the offing, but when and how much requires more measured data than seems to be available now.

The Harvey Valley Allotment is being used to demonstrate how we transfer research-developed principles and methods to administrative action. This allotment provides the pattern of management for many other allotments having similar characteristics. Therefore, it is essential that the action program on the Harvey Valley Allotment be supported by data that has been carefully gathered, analyzed, and interpreted.

As you know, we are striving to maintain the status of this allotment as an Administrative Management Unit comparable to other cattle allotments. This isn't possible in many respects because special conditions develop as a result of the research and demonstrational phases of the project. If we are going to successfully sell the principles being tested at Harvey Valley to forest officers and permittees, we need to be careful that the experimental phases do not make the system appear too complicated and costly to be applied to other allotments. Incidentally, when the time comes to increase the stocking rate on the allotment we will have some complications. At the present time the Roney's have a suspension of the upper limit and are not eligible for any increase in numbers. They could, of course, elect to move some of their preference to Harvey Valley from one of their other allotments, i.e. Eagle Lake. If Roney's refused to follow this course, we could be forced to dispose of surplus capacity on Harvey Valley to the best qualified applicant. This could mean two permittees on this allotment. We haven't figured out all the angles yet, but this is one more reason we aren't ready to consider any change of numbers or management on Harvey Valley next grazing season.

2-PSWF&RES-10/15/59

You and I have previously discussed the planning and organizing necessary to carry through with a good field day and I am very much in accord with your suggestion to Bunky Parker. I am sure we will all be pleased to see you take hold of the program planning etc. We will be glad to provide all assistance possible from this office to aid you and the forest in conducting a high caliber field day at Harvey Valley.

W. H. ...
1/15/59

FOREST SERVICE

SUSANVILLE, CALIFORNIA

Office Memorandum • UNITED STATES GOVERNMENT

TO : DIRECTOR - PSWF&RES
ATTN: E. J. WOOLFOLK

4200 (2210)
DATE: October 16, 1959

FROM : SUPERVISOR - LASSEN

SUBJECT: RANGE MANAGEMENT AND WILDLIFE HABITAT RESEARCH (Harvey Valley
Demonstration Allotment)

Reference your letter of October 1 and Reg DeNio's memorandum to you of October 15, copy of which I received.

I am completely in agreement with your thinking which is concurred in by Reg DeNio. We simply must base any increase in the present stocking on the Harvey Valley Allotment the same as we would do on any other allotment. This will mean thoroughly checking the condition and trend plots which were established by the forest for the Harvey Valley Allotment two years ago. Although Hormay has plots that are to be remeasured in 1960, the forest's regular 5-year remeasurement would not occur until 1962. Thus, if we followed our regular procedure, any adjustment would be premature prior to the season of 1963.

As pointed out by Reg DeNio, the stocking rate on the allotment with Roney's upper limit status has given us considerable concern and the extra time could well be needed to arrive at the logical answer.

I am very pleased that you have volunteered for the assignment of organizing and carrying through with the Field Day for 1960. In this regards, the Research Center Advisory Committee can be a material aid in seeing that we get a wide representation of stockmen. It seems to me that if we are to have a truly fine Field Day, we must first get the proper representation and, secondly, conduct the Field Day in a simple, clear and professional manner. I believe we now have the ingredients for a truly successful Field Day at Harvey Valley.

V. A. Parker
V. A. PARKER

*only because
of Forest
not serious!
practice!
MJA*

11 2 years?

MJA

EJW

E. J. WOOLFOLK, through KEITH ARNOLD, DIRECTOR

4883
October 19, 1959

A. L. HORMAY

Range Management and Wildlife Research

Dear Joe:

I thought the Harvey Valley research program was clarified finally when you and Mert Reed were up here in October last year. Your memorandum of September 28, however, indicates that it was not.

It is not possible to meet the main requests in your September memo because we just don't have the information you think we have. To date we have not made any remeasurements of transects and plots that provide information on changes in range condition and grazing capacity. We are in no position yet, therefore, to present data on quantitative changes in the range resulting from rest-rotation grazing. The main reason for this is that we have not had the needed manpower on the job.

To date we have been able to carry out only a portion of our planned program. To clarify our present position to both you and the Director, I have taken the time to put down the following details. We've gone over most of these before but they can bear repetition.

The Agreement

In the spring of 1950 the Lassen Forest, Regional office and the Station agreed to cooperatively carry out the Harvey Valley project.

This project was designed to check and demonstrate rest-rotation grazing together with other beneficial range practices like artificial reseeding, brush and weed control and drainage improvement.

National Forest Administration agreed to build the needed facilities and carry out the grazing management and cultural programs specified in a plan prepared by the Station. The Station in turn agreed to measure the results of these practices.

The Station's Measurement Program

The station's program, as you recall from the study plan, provided for a comparison between rest-rotation grazing and conventional season long grazing. Harvey Valley and Poison Lake Allotments were chosen for this comparison. The major factors set up for measurement on each allotment are shown below:

2-E.J.WOOLFOLK-10/16/59

	<u>Harvey Valley Allotment</u>	<u>Poison Lake Allotment</u>
1. Range Condition & Trend	1 unit each year	8 veg-types every 5 years
2. Vegetation density	3 units each year	---
3. Vegetation yield	3 units each year	---
4. Vegetation use	3 units each year	6 veg-types each year
5. Phenology see production etc.	About 20 each year	---
6. Livestock weights	About 300 head each year	About 200 head each year

The following tabulation gives you an idea of the measurement job in terms of number of transects, types areas species, head of cattle to be measured each year.

<u>Factor & Measurement Unit</u>	<u>Harvey Valley</u>	<u>Poison Lake</u>
1. Condition & Trend (transects)	36	5
2. Vegetation density (transects)	18	---
3. Vegetation yield (soil-veg types)	22	---
4. Vegetation utilisation (on soil-veg types)	171	---
(on transects)	103	24
5. Phenology (species)	20	---
6. Seed production (species)	20	---
7. Livestock weights (head)	300	200 ^{1/2}

1/ This portion of program not being carried on because cooperation with permittee could not be worked out.

Manpower

The above program, follow-up compilation, analysis, publication and related work was planned on the basis of the availability of three men full time--myself and two technical assistants.

From 1950 to date, only untrained student help has been available to the project, averaging 1.6 man months per year for field work and 1.0 man months per year for office work. The first such help was obtained in 1964, five years after the first measurements were to be made. The caliber of this help has been low, requiring excessive training and supervision time. Both output and quality of work has been below average.

I put in an average of 3.5 man months per year on the project to date. Only 1.5 man months of this was devoted to planning, supervising personnel and participating in measurement and compilation work.

Table I (attached) shows the distribution of time of manpower used on Harvey Valley and other related projects, from 1950 through September 1969. From 1950 through 1953 I was still heavily occupied with the Burgess Spring program. From 1952 through 1955 the game-browse project took about a third of my time and from 1953 through 1968 considerable time was taken up by Susanville Research Center and Forest Management activities. To put it mildly the Harvey Valley program has been greatly disjointed and woefully under-manned.

Accomplishments and Status

You can imagine what a hardship it has been to face this situation through the years, and keep things going. Time passes but we have been able to get only fragments of information on the whole program. A solid story of what is happening at Harvey Valley depends on making all the measurements set forth in the plan at the time specified. Table II (attached) shows what has been accomplished and where we stand today.

Fifty-nine percent of the planned condition and trend transects and 81 percent of the vegetation density transects have been established and measured once. The last of these measurements was made in 1957. As you remember you ordered all field work stopped in 1959. *RCET transects*
This year we didn't have trained men to do the job. No measurements of these transects have been made yet. So as I said before many times starting as early as 1956 we have no basis yet for calculating quantitative changes in grazing capacity and showing the effect of rest-rotation grazing. I can't understand the promise in the 1958 project status sheet to: (a) Complete compilation and analysis of all data collected to date -- and (b) Obtain complete set of data on range and cattle as called for in the plan -- nor your most recent request -- "If you don't have this information in usable form you will have to sit down and dig it out yourself." About the only information we have obtained on Harvey Valley consistently since 1963 and 1964 is vegetation utilization and cattle weights. I have taken most of these records myself.

Annual Report

With the data on hand, I can do no more at the present time than to describe the purpose of the Harvey Valley project and relate what has been observed in the way of changes on the range. I agree this does not fit the theme of this year's annual report

4-EEWoolfolk-10/16/59

and is unsatisfactory in other ways. But we have no choice. And under the circumstances I don't see the point of trying to force out information that has no basis in measurements yet. The solution to the situation described above is to get the needed manpower on the job. Only qualified, full time permanent personnel will do any real good. I was hopeful that some help would arrive in the past two years, but of course it has not. In any event I want to get out from under the pressure of doing the impossible. I hope the Director can help resolve this awkward situation.

A. L. HORMAY

Attachments

ALHORMAY/aj

TABLE I

DISTRIBUTION OF TIME OF A. L. HORNBY AND ASSISTANTS ON HARVEY VALLEY

AND OTHER RANGE PROJECTS 1950 - 1959 INCLUSIVE

PROJECTS

A. HARVEY VALLEY AND POISON LAKE ALLOTMENTS

- 1. Study Plans, (see 6a below)
- 2. Job plans, instructions, supervision
- 3. Measurements and compilation
 - a. Range condition & trend
 - b. Density
 - c. Yield
 - d. Utilization
 - e. Other - phenology, seed collection, etc.
 - f. Transsect, plant establishment
 - g. Livestock weights
- 4. Corp. M.F. administration, lesson and other forestry, R.O., other agencies
- 5. Meetings, field days, visitors
- 6. Plans, reports, manuscripts
 - a. Plans
 - (1) Study plan Harvey Valley Experimental Range 8/4/51
 - (2) Revision of above Harvey Valley study plan 4/25/56
 - b. Reports, manuscripts
 - (1) The Harvey Valley Demonstration Allotment July 1955 (Handout)
 - (2) Proper Management of Cattle Ranges March 1956
 - (3) Uses and Use of Utilization Standards on Livestock and Hqs. Cows Ranges
 - (4) How Livestock Grazing Habits and Growth Measurements of Range Plants Relates to Range Grazing Management
 - (5) The Harvey Valley Demonstration Allotment August 1956 (Handout)
 - (6) The Harvey Valley Experimental Range Improvement Program May 1957
 - (7) Statistics on the Harvey Valley Experimental Range Sept. 1959 (Handout)
 - (8) Pastureland Grazing Misc. paper 1959 with Dennis Dec. 1959
 - (9) Guide to Quercus Research Center 1959
 - (10) Suggestions on the Management of Harvey Valley Allotment March 1959
 - (11) Harvey Valley Story (First draft) April 1959
 - (12) Revision Moderate Grazing Range Leaflet Dec. 1959 July 1959

PROJECTS	1950		1951		1952		1953		1954		1955		1956		1957		1958		1959	
	ALL	Asst's	ALL	Asst's	ALL	Asst's	ALL	Asst's	ALL	Asst's	ALL	Asst's	ALL	Asst's	ALL	Asst's	ALL	Asst's	ALL	Asst's
	F	O	F	O	F	O	F	O	F	O	F	O	F	O	F	O	F	O	F	O
	MAN MONTHS																			
1. Study Plans, (see 6a below)																				
2. Job plans, instructions, supervision																				
3. Measurements and compilation																				
a. Range condition & trend																				
b. Density																				
c. Yield																				
d. Utilization																				
e. Other - phenology, seed collection, etc.																				
f. Transsect, plant establishment																				
g. Livestock weights																				
4. Corp. M.F. administration, lesson and other forestry, R.O., other agencies	0.5		1.0		0.5		0.5		0.5		0.5		0.5		0.5		0.5		0.5	
5. Meetings, field days, visitors			1.0		1.0		1.0		0.5		0.5		1.0		0.5		1.0		1.0	
6. Plans, reports, manuscripts																				
a. Plans																				
(1) Study plan Harvey Valley Experimental Range 8/4/51																				
(2) Revision of above Harvey Valley study plan 4/25/56	0.2		1.0																	
b. Reports, manuscripts																				
(1) The Harvey Valley Demonstration Allotment July 1955 (Handout)																				
(2) Proper Management of Cattle Ranges March 1956																				
(3) Uses and Use of Utilization Standards on Livestock and Hqs. Cows Ranges																				
(4) How Livestock Grazing Habits and Growth Measurements of Range Plants Relates to Range Grazing Management																				
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(10) Suggestions on the Management of Harvey Valley Allotment March 1959																				
(11) Harvey Valley Story (First draft) April 1959																				
(12) Revision Moderate Grazing Range Leaflet Dec. 1959 July 1959																				
Total Harvey Valley and Poison Lake Allotments	0.8	None	3.0	None	1.5	None	2.7	1.0	3.5	4.0	1.0	3.0	2.0	0.5	3.0	3.0	3.0	4.0	3.0	1.5
B. DESERES SPRING																				
1. Field work and compilation	3.4		3.0		2.0		1.5		0.5		0.5									
2. Manuscript	1.0		1.0		1.0		0.1		0.5		2.0		0.5		0.5		0.5		0.5	
3. Gene-browse			0.5		4.0		4.5		4.0		3.0		0.5		0.5		0.5		0.5	
4. Range condition & trend (Washington project)	0.7		0.5		0.5						0.2									
5. RSC administration and Forest Management															4.0		3.0		3.0	
6. Advisory Committee																			0.2	
7. All other activities	2.5		1.5		1.0		1.0		1.5		1.1		0.4		0.5		0.5		0.5	
8. Annual leave, sick leave and holidays	4.0		1.5		1.5		1.5		1.5		2.0		1.5		1.5		1.5		1.5	
Grand total (A to 8 inclusive)	12		12		12		12		12		12		12		12		12		12	

1/ Technical unless noted otherwise, labor is shown thus: (1.0) 1/ F - Field 1/ O - Office

TABLE 11

STATUS OF HARVEY VALLEY AND FOISON LAKE RANGE ALLOTMENT PROGRAMS AS OF 1959

FACTOR AND MEASUREMENT UNIT	PLAN		ACCOMPLISHMENT					
	Total to establish	Total to measure each year	Total established by 1959	First Measurements Planned Actual	Measured by 1959	Measurements by 1959	Planned Program completed	Completion of existing data
	Number	Number	Number	Date	Number	Number	Percent	Percent
HARVEY VALLEY ALLOTMENT								
1. Range condition & Trend (transects)	180	20	107	1950	1954	107	59	95
2. Vegetation density (transects)	90	18	27	1950	1956	27	31	95
3. Vegetation yield (soil-veg type areas)	22		6	1950	1956	6	20	90
4. Vegetation utilization (on type areas)	172		171	1952	1955	171	88	10
(on transects)	203			1953	none	none	0	0
5. Phytology (species)	20			1950	1951		70	0
6. Seed production (species)	20			1950	1956		10	0
7. Livestock weights (head)	300			1952	1954		90	90
FOISON LAKE ALLOTMENT								
1. Range condition & Trend (transects)	24	24	12	1951	1954	12	50	95
2. Vegetation utilization On range condition and Trend transects	24	24		1952	1955	12	10	0
3. Livestock weights (head)	200			1952	none (weighing program could not be worked out with permittee.)			

Measure* all 24 once in 5 years