Elvin and George Honey
Box 486 R
Chico, California

Dear Elvin and George:

I have completed my analysis of weights and gains for the past season at Harvey Valley. The analysis pointed up several things. Final weights of the dry heifers left in unit 1 the entire season were no different than the final weights of those moved to unit 5. Excluding the animals mixed at the final weighing, there was no difference in the weights at mid-season nor at the end of the season between the heifers left in unit 1 and those moved to unit 5. This includes pregnant as well as dry heifers.

Due to the loss of tags we had only a small number of animals for which all three weights were available for computing weight gains for the two seasons. Based on the available information, the initial weights of the two groups of dry heifers were no different. The group moved to unit 5 at mid-season gained more weight the first 1/2 than those left in unit 1. This is due to the smaller sample size and chance. The second 1/2 of the season weight gains of the two groups were the same; however, those moved to unit 5 had a greater total seasonal gain than those left in unit 1. This is due to the greater gain the first 1/2.

For the pregnant heifers, for which we have all three weights, there were no differences in initial weights, gains the first 1/2, gains the second half, nor the total seasonal gain between those moved to unit 5 and those left in unit 1.

Between the dry and pregnant heifers with all three weights available, the pregnant heifers were heavier than the dry ones at the start of the season, and there was no difference in the gains made by dry and pregnant heifers the first 1/2. Pregnant heifers out-gained the dry ones the second 1/2; however, there was no difference in the total seasonal gains in weight.
Elvin and George Honev

December 25, 1961

I am enclosing copies of additional weight and gain information and my actual use figures. I hope this information will be of use to you.

I talked with Joe Woolfolk a few days ago and we decided that it would be a good idea to see if you would be interested in putting your thoughts on Harvey Valley down on paper. They would certainly be a worthy contribution to the Journal of Range Management. Would you be willing to tackle the job? We would be glad to help you in any way we can.

Sincerely yours,

Raymond D. Patliff
Range Conservationist (Research)

Enc:

E. J. Woolfolk, Chief,
Division of Range Mgt. & Wildlife Habitat Research
M. J. Reed, EM6GER
December 26, 1961

HARVEY VALLEY

ACTUAL USE BY CATTLE

1961

A. First 1/2 of Season

Unit 1 June 3 - to - July 26
28 days + 26 days = 54 days Total

1/ 101 Head yearling Heifers X 0.7 X 54 = 5,817.8 A.U. Days
180 Head dry Cows X 1.0 X 54 = 9,720.0
4/ 4 Bulls X 1.25 X 54 = 270.0
2/ 1 Bull X 1.25 X 11 = 13.8
3/ 1 Bull X 1.25 X 17 = 21.2

287 Total

13,842.8 Total

A.M.S Used = 13,842.8 = 461.4
30

1/ 1 Heifer died on 7-26-61

2/ Removed June 14

4/ Removed June 20

4/ Removed July 26

July 26:
138 Dry Cows & 48 yearling heifers moved to Unit 5.
42 Dry Cows & 52 yearling heifers left in Unit 1.

Unit 3 June 3 - July - to - August 5
28 days + 31 days + 5 days = 64 days Total

130 Cows X 1.0 X 64 = 8,320.0
130 Calves X 9.3 X 61 = 2,379.0
3 Cows X 1.0 X 55 = 165.0
3 Calves X 0.3 X 55 = 49.5
10 Yearling Steers X 0.7 X 64 = 448.0
14 Yearling Steers X 0.7 X 61 = 497.8
9 Yearling Steers X 0.7 X 62 = 320.6

166 + 133 Calves Total

12,349.9 Total

A.M.S Used = 12,349.9 = 411.7
30

1/ Sold on August 2

3/ Removed July 27

2/ Sold on August 2

3/ Removed August 3

Include 1 yearling Heifer

August 5:
130 Dry Cows & 10 yearlings moved to Unit 5.
No cattle left in Unit 3.
B. Second 1/2 of Season

<table>
<thead>
<tr>
<th>Unit 1</th>
<th>July 27 - August - to - September 30</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5 days + 31 days + 30 days = 66 days Total</td>
</tr>
</tbody>
</table>

A.U. Days

- 42 Head dry Cows x 1.0 x 66 = 2,772.0
- 47 Head yearling Heifers x 0.7 x 66 = 2,171.4
- 7 Head yearling Heifers x 0.7 x 55 = 192.5

Total = 5,135.9

Plus:
- 258 Head dry Cows x 1.0 x 1 = 258.0
- 57 Head of Yearlings x 0.7 x 1 = 39.9

Total = 5,433.8

A.U.Ms Used = 5,433.8 / 30 = 181.1

1/ Out 11 days, August 9 to 20
2/ Moved to holding field on September 29 from Unit 5; removed with others on September 30th.

Unit 5

<table>
<thead>
<tr>
<th>1/</th>
<th>July 27 - August - to - September 29</th>
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<tbody>
<tr>
<td></td>
<td>5 days + 31 days + 29 days = 65 days Total</td>
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</table>

A.U. Days

- 138 Head dry Cows x 1.0 x 10 = 1,380.0
- 48 Head Yearlings x 0.7 x 10 = 336.0
- 258 Head dry Cows x 1.0 x 55 = 14,190.0
- 10 Head dry Cows x 1.0 x 5 = 50.0
- 52 Yearlings x 0.7 x 55 = 2,002.0
- 5 Yearlings x 0.7 x 44 = 154.4
- 1 Yearling x 0.7 x 52 = 36.4

Total = 18,148.8

A.U.Ms Used = 18,148.8 / 30 = 605.0

1/ Total time for cattle moved from Unit 1.
2/ Total time for cattle moved from Unit 3.
3/ Head in Unit 5 before cattle moved from Unit 3.
4/ Removed on August 10.
5/ Out 11 days, August 9 to 20.
6/ Killed during hunting season, on about September 26.
### Harvey Valley

#### C. Season Totals

<table>
<thead>
<tr>
<th>Unit</th>
<th>1st 1/2</th>
<th>2nd 1/2</th>
<th>AIMs Used</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
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<td></td>
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<td>461.4</td>
<td>642.5</td>
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<td>1/</td>
<td>AIMs in Unit</td>
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<td>411.7</td>
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<td>% Use</td>
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<tr>
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<td></td>
<td>2nd 1/2</td>
<td>605.0</td>
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<td>AIMs in Unit</td>
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<tr>
<td></td>
<td></td>
<td>% Use</td>
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#### Allotment Totals:

<table>
<thead>
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<th>AIMs</th>
<th>AIMs Used</th>
<th>% Use</th>
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</thead>
<tbody>
<tr>
<td>2,119.1</td>
<td>1,659.2</td>
<td>76.3</td>
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1/ AIMs are based on the 1949 Map (I have made adjustments, as far as possible, for reseeding and spraying of sagebrush.)
LIVESTOCK WEIGHTS 1961

HARVEY VALLEY EXPT. RANGE

Weigh Animals in 1961 were Yearling Heifers.

Average weight per head on June 9th, when they went onto the Allotment was 518 pounds.

Average weight at mid-season was 616 pounds.

Average weight on September 29, when they went off the Allotment was 669 pounds.

Gains to mid-season (51 days) were 1.92 pounds per head per day.

Gains for the 2nd 1/2 of the Season (65 days) were 0.82 pounds per head per day.

Average gain for the 116 days was 1.30 pounds per head per day.
SPEED-MEMO

TO
E. J. Woolfolk, Chief.
Division of Range Management

FROM
Raymond D. Ratliff
SRC

SUBJECT
Harvey Valley

DATE
27 Dec. 1961

MESSAGE (Write concise message. Sign and forward parts 1 and 2 to addressee. Retain part 3)

Joe:

Enclosed is a copy of my report to Elwin & George Roney on the cattle weights and actual use in Harvey Valley for the 1961 grazing season.

Data on forage utilization will be sent as soon as they are typed.

In the letter to Roney's I have inquired whether they would be willing to write a paper on Harvey Valley.

SIGNATURE
Raymond D. Ratliff

REPLY (Use this space for reply. Sign and date. Return part 1 to sender. Retain part two)

Ray:

Very good. Suggest you follow up on the WV. Write up from more Roney will go along but they will also be hard to start. You may have to do the writing yourself after an interval of two.

Happy New Year.

SIGNATURE

DATE
12/19/61