HARVEY VALLEY REPORT
1963

History
1934-1945 about 700 cattle were grazed.
1935 The May 16 on date was changed to June 1.
1946-1947 615 head were grazed.
1948 515 head were allowed.
1949 The Oct. 15 off date was changed to Sept. 30.

1933 Survey gave 3,506 CM on 20,424 usable acres. (Lassen Forest)
1961 Survey gave 4,750 CM on 21,463 usable acres. (Lassen Forest)

Summary
The CMs have increased 1,244 or 16% in 28 years.
The usable acres have increased 1,039 in 28 years.
The permitted cattle no. has decreased 185 head or 16.5%.
30 days in the grazing season or 20% in seasonal total was decreased.
Note—In 1948-1949 Gus Hormay made his field map of Harvey and
also developed the Management Plan.
In 1948-1949 the grazing season was shortened 15 days and the
number of head decreased 100 making a total deeces of 707 CMs.
1947 615 head for 4½ months = 2,767 CM
1948-1949 515 head for 4 months = 2060 CM.
1946 700 head for 4½ months = 3,150 CM
1946 to 1949 there was a decrease of 1090 CM, reducing permitted: No. 272
1933 -- 3,506 CM -- 3,500 CM used)
1961 -- 4,750 CM -- 2,060 CM used.) 4.1% decrease

Experiment or Demonstration

The rest-rotation system has not been proven in Harvey Valley, therefore it is still an experiment.

I. Range management plan has to be completed before accurate results can be obtained.
   A. Water developments have not been completed according to plan.
      1. Livestock have lost use of several water developments and springs.
         a. Helicopter landing in Unit 2.
         b. Logging trucks use spring water. They need separate wells.
         c. Much more development of water in field 2 is necessary for last of season use.
   B. Labor Range rider is key to success—extremely hard to hire rider to qualify all places, maintenance, cattle, comprehension of experiment etc.
   C. Fences Expensive and have to be exceptionally strong due to water and lush feed just thru the fence and demanded forced feeding on their side.
   D. Economically proven cultural practices necessary to
make this expensive system of management feasible. In modern farming fertilizer and insecticides proven to be economically feasible are essential for net income.

In conclusion, I would like to request a progress report form the Research Center so as to judge the effectiveness of rest-rotation grazing. Also, I would like a progress report from the Forest on the Harvey Valley allotment, the adjoining ranges, Grey Valley and Poison Lake to compare the trend and condition.

Cattle Economics In a Rest Rotation System

Page 7 --- Rest-rotation Grazing by A.L. Hormay and A.B. Evanko

"The season that best fits a given situation is often determined not only by the livestock production potentialities of the season, but by such other considerations as when the range can be used to best advantage in relation to the whole ranching operation"

I. The condition of cattle on adjoining ranges should be watched more closely as I did this year for the first time. The Poison Lake and Gray Valley allotments produced bloomier calves and a far superior salable product than did Harvey Valley. I consider the quality of cattle on these three ranges comparable.

II. Nutrition of plants is not always the same. Consideration should be given to forage according to T.D.N. value. Therefore the only way the desired "forced feeding" can work into a cattle management plan is to use protein supplement feed and use the low T.D.N. forage plant for roughage.

III. "Forced feeding" of plants results in low gains or weight loss—therefore you cannot afford to "force feed" cattle you plan to sell.

A. Comparing Eagle Lake and Harvey Valley calf weights in 1962 with cows receiving exactly the same treatment during winter and spring, the Eagle Lake steer calves weighed 54# per head more and heifer calves 27# a head more than the Harvey calves. This is the nearest Harvey calves have come to the Eagle Lake weights because the calves that went to Harvey were in better shape when they came to the mountains than were the Eagle Lake calves this year.

B. The salable product of the range whether yearlings or calves must be taken from the allotment before "forced feeding" is started. The average time according to the gain curve of Gus Hormay, should be Aug. 15 or before.

IV. Animal behavior should be considered to a greater degree.

We believe an economic study of Harvey Valley should be completed to be sure this system is economically sound. An animal unit can only support a limited amount of capitol outlay in any ranch operation.
Solution

1. Closer co-operation between agencies and permittee so we can understand the figures, progress and make management decisions.

2. Complete the plan especially water development

3. Economic Study

4. Progress report from Station and Forest

5. Our plan for 1963 to fit ranch operation, cattle economics and research rest-rotation plan.

Permittee's Grazing Plan

<table>
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<tr>
<th>Field</th>
<th>Period</th>
<th>Head Number</th>
<th>CM</th>
<th>Expt. CM</th>
<th>AU available</th>
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<tr>
<td>Field IV</td>
<td>300 head June 1 to July 15</td>
<td></td>
<td>450</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 head July 15 to Nov. 1</td>
<td></td>
<td>350</td>
<td></td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
<td>800</td>
<td></td>
<td>682</td>
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<tr>
<td>Field V</td>
<td>200 head June 1 to July 15</td>
<td></td>
<td>300</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 head July 15 to Aug. 15</td>
<td></td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
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<tr>
<td>Field I</td>
<td>15 head full June 1 to Nov. 1</td>
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<td></td>
<td>200 Head from IV July 15 to Aug. 15</td>
<td></td>
<td>200</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>100 head from V July 15 to Aug. 15</td>
<td></td>
<td>100</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>150 head Aug. 15 to Nov. 15</td>
<td></td>
<td></td>
<td>375</td>
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<tr>
<td>Total</td>
<td></td>
<td></td>
<td>750</td>
<td></td>
<td>812</td>
</tr>
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</table>

Sell 250 from I on Aug. 15.

Do you have this many CM's available in these three fields?

Field IV 682 + 3633 = 19% * 4750 = 902.5 CM
Field I 812 + 3633 = 22% * 4750 = 1045 CM
Field V 593 + 3633 = 16% * 4750 = 760 CM

Forest 1961 CM figure converted from Ray Ratliff adjusted field capacity Dec. 26, 1961. I've used Ray's figures to determine the % carrying capacity of Harvey these three fields possess. Then apply this % factor to the Forest CM for their carrying capacity.