To: State Director, Montana State Office

From: A. L. Hormay, Range Conservationist, Berkeley

Subject: Best-rotation grazing management questionnaire 1971

September 7, 1973

At Kelly Hammond's request I am sending you the original completed copies of the best-rotation grazing management questionnaire submitted to me from Montana. There are a total of 77.

Kelly said you received summaries of results for Montana, but not for the Bureau as a whole. These are in Washington together with my analysis.

The red numbers and marks on the questionnaires were used in compilation and analysis. The number in the upper left-hand corner of the first page is the questionnaire number. The questionnaires were numbered in order as received. The number in the middle of the top of the first page is the code number for the district or state office.

These code numbers and the number of returns from each office are shown below:

<table>
<thead>
<tr>
<th>Code</th>
<th>Office</th>
<th>No. of returns</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>Billings</td>
<td>24</td>
</tr>
<tr>
<td>31</td>
<td>Dillon</td>
<td>9</td>
</tr>
<tr>
<td>32</td>
<td>Lewistown</td>
<td>9</td>
</tr>
<tr>
<td>33</td>
<td>Malta</td>
<td>19</td>
</tr>
<tr>
<td>34</td>
<td>Miles City</td>
<td>None</td>
</tr>
<tr>
<td>35</td>
<td>Missoula</td>
<td>7</td>
</tr>
<tr>
<td>36</td>
<td>Lake State Project</td>
<td>3</td>
</tr>
<tr>
<td>00</td>
<td>State</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>77</strong></td>
</tr>
</tbody>
</table>
September 10, 1973

Mr. Curtis J. Berklund, Director
Bureau of Land Management
U.S. Department of the Interior
Washington, D.C. 20250

Your ref.: 1400-410 (330)

Dear Mr. Berklund:

The referenced letter from Mr. Boyd Rasmussen, dated May 25, 1971, documented an informal understanding between our two agencies—that we would provide your employee, Gus Hormay, with office space and secretarial services. It also provided for periodic review of this arrangement.

The current reorganization of this Station, and the continuing need to economize in space and personal services, prompts my inquiry concerning your plans for Gus Hormay. We are now decentralizing the line direction of our research work units to the field in closer proximity to the research problems. In so doing, we have removed all range research from this office and, therefore, the direct tie with our range research unit is limited. We are willing to continue our current arrangements, but we need some information about your plans to help us in making adjustments to fit in with our new organization.

With these facts about our current situation in mind, I would appreciate your review of this arrangement. My FTS number is 415-841-3228 should you wish to call me.

Sincerely,

H. W. CAMP
Director
Mr. August L. Hormay  
Pacific Southwest Forest &  
Range Experiment Station  
Post Office Box 245  
Berkely, California  94701

September 20, 1973

Dear Gus:

Enclosed are pencilled route maps of our tour of the Crowder-Weisser  
Cattle Company Allotment.

The Allotment boundary and the Kofa Game Range boundary are identified on the maps.

On a separate sheet are listed the stops, as we remember them, in chronological order.

Also enclosed is a vegetative type breakdown with the major species listed by latin abbreviations.

Sincerely,

[Signature]

Assistant District Manager

Enclosures 3
CROWDER-WEISSER GRAZING ALLOTMENT STOPS - SEPTEMBER 11, PHOENIX DISTRICT

1. Crowder Well
2. Coyote Peak Well
3. Jim Craven Well
4. Hoodoo Well
5. De La Osa or Midway Well
6. Wiltbanks Cabin
7. Squaw Peak Tanks
8. Kehlind Tank

STOPs SEPTEMBER 12

9. The well that we stopped at first on the morning of Wednesday, September 12, 1973, on state land.

10. Mine
11. Crippen Well
12. John Weisser Well
13. Bouse Flood Plain
14. East Tank'
15. LaBelle Well
16. Brenda Well
17. New Brenda
<table>
<thead>
<tr>
<th>Vegetative Type</th>
<th>Acres</th>
<th>Ground Cover</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creosote Bush</td>
<td>181,043</td>
<td>6</td>
</tr>
<tr>
<td>Desert Shrub</td>
<td>74,000</td>
<td>5</td>
</tr>
</tbody>
</table>
southeast into the Gila River. The elevation ranges from 510 to

<table>
<thead>
<tr>
<th>Topography</th>
<th>75</th>
<th>30</th>
<th>49</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Mountain</td>
<td>25</td>
<td>70</td>
<td>51</td>
</tr>
</tbody>
</table>

2. Soils. The mountains contain shallow soils, developed upon remnants of granites, schists, and basic igneous rocks. These soils are predominantly stony, cobbly, gravelly and sandy with areas of rock outcrop. Soils of the alluvial plain are derived from accumulations of rocks. The majority of these soils are sand and gravelly assorted and low in organic matter. These soils are covered with desert pavement and are underlain with a continuous hard pan in most areas.

3. Vegetation. The allotment consists of two major vegetative types: Creosote bush and desert shrub. The creosote bush type covers the plains and the desert shrub type occupies the mountain ranges. (see form 4412-2 in Appendix for species of plants) Ephemeral forage produces up to 3,000 pounds of forage per acre during years of high precipitation and favorable temperatures. Important ephemeral forage species in both vegetative types are Indian wheat (Plantago), filaree (Erodium cicutarium), (Pectocarya),
UNITED STATES GOVERNMENT

Memorandum

TO: David Little Seeding Project File

FROM: Malcolm J. Schnitzer, Cascade Area Manager

DATE: September 21, 1973

SUBJECT: Establishing Experimental Plots

On September 19, 1973, Hugh Harper, Jim Gabettas, Andy Trudan, Max Macfarlane and I established two experimental seeding sites on the Black Canyon - Four Pasture Rest Rotation grazing system (David Little's Indian Jake Allotment), in accordance with procedures set out in Gus Hormay's memo of October 6, 1972.

Jim Little met us at 9:00 a.m. and indicated that Pasture #9 (Station Gulch South) would receive the "A" treatment (livestock use from December to the middle of May) and that Pasture #5 (Mud Lake South) would receive the "D" treatment rest to the middle of May, then livestock grazing during the last half of May through June.

Experimental Plot #1 as identified on the attached map is located in Pasture #9 (Station Gulch South) and Plot #2 is in Pasture #5 (Mud Lake South).

Each plot measures 1000' X 400' and rebar or angle iron is located at each corner as well as at various points along the outside perimeter. Each plot is divided into half (1000' X 200'), with a single row of rebar or angle iron through the center of the plot:

A mixture of the following listed species will be planted by a rangeland drill in one side of the 400' X 1000' plot and the same mixture will be land broadcast in the other half of the 400' X 1000' plot:

Pubescent wheatgrass
Whitmar wheatgrass
Western wheatgrass
Slender wheatgrass

Buy U.S. Savings Bonds Regularly on the Payroll Savings Plan
The work will be done in the following manner:

Plot #1

A. Seed will be drilled as soon as possible.

B. Seed will be broadcast soon after the cattle have entered the pasture in December, to obtain the seed trampling treatment. The pasture will be rested the following year which will provide for seedling establishment with a minimum of competition.

Plot #2

A. Seed will be drilled as soon as possible.

B. Seed will be broadcast soon after the cattle have entered the pasture during the last half of May, to obtain the seed trampling treatment. The pasture will receive treatment "A" the following year (livestock use).

The purpose of the project will be to evaluate the response of introduced perennials under a variety of grazing treatments (A & B). It is assumed that if the results are favorable, an effort will be made to convert vegetative type from an annual to perennial grass and shrub type. The two methods of application are used to judge response of the seed trampling treatment, as compared to drilling.

Enclosure 1
Encl. 1 - Map
Memorandum

To: Mike Bowman, Area Manager, Boise District, Boise

From: A. L. Hormay, Range Conservationist, Berkeley

Subject: Management and artificial seeding Indian Jake Allotment

Management

This spring while visiting on the Indian Jake Allotment, I suggested an adjustment in the grazing formula for the pasture system involving the Mud Lake and Station Gulch pastures—units 3, 5 and 6, 9. The adjustment was suggested to take care of two herds of cattle, a longer grazing season, and to obtain desired heavy use of medusae-head and cheatgrass at the right time.

The suggested formula is shown below:

Use of this formula will result in little change in use of pastures called for by the old formula. This coming year (1972) use in Mud Lake North and Station Gulch South pastures will be the same as under the old formula. The
Boise Cascade herd will go into Station Gulch South (Unit 9) and the cow and calf herd into Mud Lake North (Unit 3) with the new formula. Station Gulch North (Unit 8) is scheduled for rest and Mud Lake South (Unit 5) for late spring use.

If the Boise Cascade herd cannot be carried in the pasture getting treatment A until time to leave the allotment, open the pasture getting treatment B to these cattle. But do this before spring growth starts (March?). Do not graze in "B" after growth starts. Maximum dry feed is needed in this field to take care of the large cow and calf herd that will be grazing in the field the following winter.

The cow and calf herd should graze in the pasture getting treatment C until medusae-head is full grown—is fully headed. Then the cattle should be moved to the pasture getting treatment D for the remainder of the season. If it looks like the cattle will run out of feed in "pasture C" before medusae is fully headed, open "pasture D" and let the cattle graze back and forth in both the pastures. When medusae is headed put all the cattle in "D."

The proposed use in the 4 pastures in 1972 is shown in the following diagram:

<table>
<thead>
<tr>
<th>Mud Lake North (3)</th>
<th>Station Gulch North (2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>B</td>
</tr>
<tr>
<td>Dec. 1 +</td>
<td></td>
</tr>
<tr>
<td>Cow-calf herd</td>
<td>Use with (9) before spring growth starts if necessary</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Move into (5) when medusae headed</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Mud Lake South (5)</th>
<th>Station Gulch South (9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>A</td>
</tr>
<tr>
<td>Dec. 1 =</td>
<td></td>
</tr>
</tbody>
</table>

Boise Cascade herd
Fall planting can be done any time after the cattle are turned into the pastures and ground conditions are favorable for drilling. In springtime, plant as early as possible. Broadcasting may be done earlier than drilling.

Mark the boundaries of each plot clearly and carefully record what was done.

The seeding work will no doubt end up to be a sizeable job. However, it is important. We will soon know whether or not medusae-head and cheat-grass can be controlled by the methods used here. No one has developed practical means of controlling these species to date. Let’s hope the breakthrough comes on the Boise District.

cc: R. Thompson
    District Manager, Boise

Signed in Mr. Horman’s absence
   to avoid delay
Memorandum

To: Director, BLM

From: A. L. Hormay, Range Conservationist, Berkeley

Subject: Rest-Rotation and Multiple-Use Land Management

This is in reply to Associate Director George Turcott's memorandum of August 20, 1973.

In 1964 the Bureau expressed great interest in rest-rotation management and proposed to learn about it through classroom sessions conducted by me and through pilot field trials. At that time I pressed for informing Bureau leaders, the Director and State Directors and their top aids, first. I wanted their understanding and approval of the management method before training field personnel.

After 9 years leadership has still not found time to listen to the story of rest-rotation management which includes not only management principles but planning and evaluation procedures as well.

I proceeded with training of field personnel but covered only management principles. I was deterred from explaining planning and evaluation procedures because they were in conflict with procedures being developed by the Bureau.

As a consequence Bureau people have not been adequately informed on rest-rotation management, and have done poorly with it on the ground. Please read my report of January 28, 1972 on the status of rest-rotation management in the Bureau.

I have been discouraged, not by the Bureau's performance with rest-rotation management, which is understandable under the circumstances, but because leadership has not heard the story. Its understanding and support are essential for satisfactory field accomplishment.

Is the Bureau interested in hearing the story?

G. L. Hormay